

=> e das rakha/au

```
E1      1      DAS RAJSEKHAR/AU
E2      1      DAS RAJYASHRI/AU
E3      0 --> DAS RAKHA/AU
E4      30     DAS RAKHA H/AU
E5      21     DAS RAKHA HARI/AU
E6      1      DAS RAKHAHARI/AU
E7      9      DAS RAKHEE/AU
E8      15     DAS RAM/AU
E9      1      DAS RAM SARAN/AU
E10     1      DAS RAMA/AU
E11     2      DAS RAMAN M/AU
E12     2      DAS RAMCHANDANI G/AU
```

=> s e4-e6 and mycobacter?

```
L1      2      ("DAS RAKHA H"/AU OR "DAS RAKHA HARI"/AU OR "DAS RAKHAHARI"/AU)
          AND MYCOBACTER?
```

=> dup rem l1

PROCESSING COMPLETED FOR L1

```
L2      1 DUP REM L1 (1 DUPLICATE REMOVED)
```

=> d bib ab

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

AN 2005:497348 CAPLUS

DN 143:39117

TI Methods for detecting pathogenic mycobacteria in clinical  
specimens by amplification of intergenic region between mmaA1 and mmaA2  
genes

IN Das, Rakha Hari; Kumar, Ajay; Singh, Meghpati

PA India

SO U.S. Pat. Appl. Publ., 23 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005123928	A1	20050609	US 2003-725994	20031203
	WO 2005056831	A1	20050623	WO 2003-IB5767	20031209
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003288577	A1	20050629	AU 2003-288577	20031209
PRAI	US 2003-725994	A	20031203		
	WO 2003-IB5767	A	20031209		

AB The present invention relates to detection of pathogenic  
mycobacteria in clin. specimens such as sputum, cerebrospinal  
fluid, gastric lavage and tissue biopsies. Methods for extraction of genomic  
DNA and amplification of intergenic region between Me mycolic acid  
synthase genes mmaA1 and mmaA2 and the flanking region in mmaA1 and mmaA2  
genes are presented.

=> e kumar ajay/au

```
E1      1      KUMAR AHOSK/AU
```

E2 28 KUMAR AJAI/AU  
 E3 793 --> KUMAR AJAY/AU  
 E4 2 KUMAR AJAY AJEET/AU  
 E5 2 KUMAR AJAY HARINARAIN/AU  
 E6 4 KUMAR AJAY R/AU  
 E7 2 KUMAR AJAY V/AU  
 E8 2 KUMAR AJAYA/AU  
 E9 1 KUMAR AJAYA R/AU  
 E10 5 KUMAR AJEET/AU  
 E11 1 KUMAR AJENDRA/AU  
 E12 1 KUMAR AJID/AU

=> s e2-e9 and mycobacter?

L3 5 ("KUMAR AJAI"/AU OR "KUMAR AJAY"/AU OR "KUMAR AJAY AJEET"/AU OR  
 "KUMAR AJAY HARINARAIN"/AU OR "KUMAR AJAY R"/AU OR "KUMAR AJAY  
 V"/AU OR "KUMAR AJAYA"/AU OR "KUMAR AJAYA R"/AU) AND MYCOBACTER?

=> dup rem l3

PROCESSING COMPLETED FOR L3

L4 3 DUP REM L3 (2 DUPLICATES REMOVED)

=> d bib ab 1-

YOU HAVE REQUESTED DATA FROM 3 ANSWERS - CONTINUE? Y/(N):y

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

AN 2005:497348 CAPLUS

DN 143:39117

TI Methods for detecting pathogenic mycobacteria in clinical  
 specimens by amplification of intergenic region between mmaA1 and mmaA2  
 genes

IN Das, Rakha Hari; Kumar, Ajay; Singh, Meghpati

PA India

SO U.S. Pat. Appl. Publ., 23 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005123928	A1	20050609	US 2003-725994	20031203
	WO 2005056831	A1	20050623	WO 2003-IB5767	20031209
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2003288577	A1	20050629	AU 2003-288577	20031209
PRAI	US 2003-725994	A	20031203		
	WO 2003-IB5767	A	20031209		

AB The present invention relates to detection of pathogenic mycobacteria in clin. specimens such as sputum, cerebrospinal fluid, gastric lavage and tissue biopsies. Methods for extraction of genomic DNA and amplification of intergenic region between Me mycolic acid synthase genes mmaA1 and mmaA2 and the flanking region in mmaA1 and mmaA2 genes are presented.

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:661354 CAPLUS

DN 140:128341

TI Synthesis of novel heterocyclic compounds: Routes to pyrazolyl-1,2,3-  
 triazoles and their biological activity evaluation  
 AU Kumar, Ajay; Husain, Mofazzal; Prasad, Ashok; Singh, Ishwar;  
 Vats, Archana; Sharma, Nawal K.; Sharma, Sunil K.; Gupta, Rajinder K.;  
 Olsen, Carl E.; Bracke, Marc E.; Gross, Richard A.; Parmar, Virinder S.  
 CS Bioorganic Laboratory, Department of Chemistry, University of Delhi,  
 Delhi, 110 007, India  
 SO Indian Journal of Chemistry, Section B: Organic Chemistry Including  
 Medicinal Chemistry (2003), 42B(8), 1950-1957  
 CODEN: IJSBDB; ISSN: 0376-4699  
 PB National Institute of Science Communication  
 DT Journal  
 LA English  
 OS CASREACT 140:128341  
 AB A series of 5-aryl-3-cyanomethylpyrazoles I (R1 = H, Me, OMe, F, Cl, Br)  
 has been synthesized by refluxing 6-aryl-3-cyano-4-methylthio-2H-pyran-2-  
 ones II with hydrazine. The active methylene moiety of I has further been  
 exploited to build 1,4-disubstituted 5-amino-1,2,3-triazoles III (R1 = H,  
 Me, OMe, F, Cl, Br; R2 = NO2; R3 = H; R1 = H, Me, OMe, Cl, Br; R2 = H; R3  
 = NO2) via base-catalyzed condensation with 3- or 4-nitrophenyl azides.  
 All these compds. have been characterized by detailed spectral anal. and  
 chemical transformations to confirm their structures unambiguously, which  
 were proposed inconclusively five decades ago. Further, III have been  
 tested as antiinvasive agents against solid tumors and as  
 antimycobacterial agents.

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
 DUPLICATE 2  
 AN 2000:305395 BIOSIS  
 DN PREV200000305395  
 TI Isolation of a novel insertion sequence from Mycobacterium  
 fortuitum using a trap vector based on inactivation of a lacZ reporter  
 gene.  
 AU Waskar, Morris; Kumar, Deepak; Kumar, Ajai; Srivastava, Ranjana  
 [Reprint author]  
 CS Division of Microbiology, Central Drug Research Institute, Lucknow,  
 226001, India  
 SO Microbiology (Reading), (May, 2000) Vol. 146, No. 5, pp. 1157-1162. print.  
 ISSN: 1350-0872.  
 DT Article  
 LA English  
 OS EMBL-MF018875; EMBL-Y18875  
 ED Entered STN: 19 Jul 2000  
 Last Updated on STN: 7 Jan 2002  
 AB An insertion sequence of Mycobacterium fortuitum has been  
 isolated using a trap vector following insertion in and inactivation of  
 the lacZ reporter gene. The trap vector is a temperature-sensitive (ts)  
 Escherichia coli-mycobacterium shuttle plasmid, pCD4, which  
 contains ts oriM, the kanamycin-resistance gene as a selection marker and  
 a lacZ expression cassette. The ts mutation present in pCD4 functions in  
 mycobacteria and enables screening for transposable elements from  
 the mycobacterial genome that disrupt the lacZ gene by screening  
 for white colonies on X-Gal plates in both mycobacterial as well  
 as E. coli hosts. The vector was used to isolate a novel 1.653 kb  
 insertion sequence from M. fortuitum named IS219. IS219 duplicated host  
 DNA at the target site, had inverted repeats at its ends and contained two  
 ORFs on one strand. One of the predicted proteins showed homology to a  
 putative transposase from Acetobacter pasteurianus. IS219 was present in  
 two copies in the genome of M. fortuitum. The trap vector appears to be  
 useful in trapping insertion sequences from different mycobacteria  
 by screening for the disrupted LacZ phenotype.

=> e singh meghpati/au

E1 169 SINGH MEGH/AU  
E2 58 SINGH MEGHA/AU  
E3 2 --> SINGH MEGHPATI/AU  
E4 3 SINGH MEHA/AU  
E5 20 SINGH MEHAR/AU  
E6 39 SINGH MEHARBAN/AU  
E7 58 SINGH MEHARVAN/AU  
E8 1 SINGH MEHARVVAN/AU  
E9 2 SINGH MEHENDRA P/AU  
E10 3 SINGH MEHESHINDER/AU  
E11 1 SINGH MELBRA D/AU  
E12 6 SINGH MEV/AU

=> s e1-e3 and mycobacter?

L5 4 ("SINGH MEGH"/AU OR "SINGH MEGHA"/AU OR "SINGH MEGHPATI"/AU)  
AND MYCOBACTER?

=> dup rem l5

PROCESSING COMPLETED FOR L5

L6 3 DUP REM L5 (1 DUPLICATE REMOVED)

=> d bib ab 1-

YOU HAVE REQUESTED DATA FROM 3 ANSWERS - CONTINUE? Y/(N):y

L6 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

AN 2005:497348 CAPLUS

DN 143:39117

TI Methods for detecting pathogenic mycobacteria in clinical  
specimens by amplification of intergenic region between mmaA1 and mmaA2  
genes

IN Das, Rakha Hari; Kumar, Ajay; Singh, Meghpati

PA India

SO U.S. Pat. Appl. Publ., 23 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005123928	A1	20050609	US 2003-725994	20031203
	WO 2005056831	A1	20050623	WO 2003-IB5767	20031209
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2003288577	A1	20050629	AU 2003-288577	20031209
PRAI	US 2003-725994	A	20031203		
	WO 2003-IB5767	A	20031209		

AB The present invention relates to detection of pathogenic mycobacteria in clin. specimens such as sputum, cerebrospinal fluid, gastric lavage and tissue biopsies. Methods for extraction of genomic DNA and amplification of intergenic region between Me mycolic acid synthase genes mmaA1 and mmaA2 and the flanking region in mmaA1 and mmaA2 genes are presented.

L6 ANSWER 2 OF 3 USPATFULL on STN

AN 2004:268354 USPATFULL  
 TI Mitogen activated protein kinase-activated protein kinase-2 inhibiting compounds  
 IN Vernier, William F., Oceanside, CA, UNITED STATES  
 Anderson, David R., Lake St. Louis, MO, UNITED STATES  
 Phillion, Dennis P., St. Charles, MO, UNITED STATES  
 Meyers, Marvin J., St. Charles, MO, UNITED STATES  
 Hegde, Shridhar G., Ballwin, MO, UNITED STATES  
 Reitz, David B., Chesterfield, MO, UNITED STATES  
 Buchler, Ingrid P., South University City, MO, UNITED STATES  
 Mahoney, Matthew W., St. Peters, MO, UNITED STATES  
 Rogers, Thomas E., Ballwin, MO, UNITED STATES  
 Poda, Gennadiy, Chesterfield, MO, UNITED STATES  
 Singh, Megh, Ellisville, MO, UNITED STATES  
 Wu, Kun K., Chesterfield, MO, UNITED STATES  
 Xie, Jin, Ballwin, MO, UNITED STATES  
 PA Pharmacia Corporation, Chesterfield, MO (U.S. corporation)  
 PI US 2004209897 A1 20041021  
 AI US 2003-742072 A1 20031219 (10)  
 PRAI US 2002-434962P 20021220 (60)  
 DT Utility  
 FS APPLICATION  
 LREP Charles E. Dunlap, Nelson Mullins Riley & Scarborough, LLP, 17th Floor, 1320 Main Street, Columbia, SC, 29211  
 CLMN Number of Claims: 34  
 ECL Exemplary Claim: 1  
 DRWN 4 Drawing Page(s)  
 LN.CNT 19711

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds are described which inhibit mitogen activated protein kinase-activated protein kinase-2 (MK-2). Methods of using such compounds for the inhibition of MK-2, and for the prevention or treatment of a disease or disorder that is mediated by TNF $\alpha$ , are described, where the method involves administering to the subject an MK-2 inhibiting compound of the present invention. Therapeutic compositions, pharmaceutical compositions and kits which contain the present MK-2 inhibiting compounds are also described.

L6 ANSWER 3 OF 3 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
 AN 1995:347292 BIOSIS  
 DN PREV199598361592  
 TI Aggregation and deformability of erythrocytes in leprosy.  
 AU Kumaravel, M.; Singh, Megha [Reprint author]  
 CS Biomed. Eng. Div., Indian Inst. Technol., Madras 600 036, India  
 SO Indian Journal of Experimental Biology, (1995) Vol. 33, No. 6, pp. 408-415.

CODEN: IJEBA6. ISSN: 0019-5189.

DT Article  
 LA English  
 ED Entered STN: 10 Aug 1995  
 Last Updated on STN: 10 Aug 1995

AB The hemorheological parameters, erythrocyte aggregation and deformability are determined in leprotic patients and are compared with that of healthy subjects. The aggregation is determined by sequential analysis of the He-Ne laser transmission data through erythrocyte suspension at hematocrit 5%. The erythrocyte deformability is determined by measurement of passage time (reciprocal of deformability) of erythrocyte suspension in PBS at hematocrit 6% through cellulose membrane. The observations show that in leprosy the aggregation of erythrocyte is marginally reduced and the deformability is significantly increased. These parameters in combination with low hemoglobin and hematocrit levels in these patients lowers the blood viscosity to maintain the transport of material across the capillary wall.

=> s detect?(2w)mycobact?  
L7 7678 DETECT?(2W) MYCOBACT?

=> s l7 and primer?  
L8 1490 L7 AND PRIMER?

=> s l8 and PCR  
L9 1284 L8 AND PCR

=> s l9 and RFLP  
L10 68 L9 AND RFLP

=> dup rem l10  
PROCESSING COMPLETED FOR L10  
L11 59 DUP REM L10 (9 DUPLICATES REMOVED)

=> d bib ab 1-  
YOU HAVE REQUESTED DATA FROM 59 ANSWERS - CONTINUE? Y/(N):y

L11 ANSWER 1 OF 59 USPATFULL on STN

AN 2006:151461 USPATFULL

TI Delete sequence in m, tuberculosis, method for detecting  
mycobacteria using these sequences and vaccines

IN Cole, Stewart, Paris, FRANCE  
Brosch, Roland, Paris, FRANCE  
Gordon, Stephen, Surrey, UNITED KINGDOM  
Eiglmeier, Karin, Paris, FRANCE  
Garnier, Thierry, Paris, FRANCE  
Hewinson, Glyn, Hants, UNITED KINGDOM

PI US 2006127897 A1 20060615

AI US 2003-505405 A1 20030225 (10)

WO 2003-IB986 20030225  
20060113 PCT 371 date

PRAI EP 2002-290458 20020225

DT Utility

FS APPLICATION

LREP FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, 901 NEW YORK  
AVENUE, NW, WASHINGTON, DC, 20001-4413, US

CLMN Number of Claims: 59

ECL Exemplary Claim: 1

DRWN 6 Drawing Page(s)

LN.CNT 3519

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is the identification of a nucleotide sequence  
which make it possible in particular to distinguish an infection  
resulting from the vast majority of Mycobacterium tuberculosis strains  
from an infection resulting from Mycobacterium africanum, Mycobacterium  
canetti, Mycobacterium microti, Mycobacterium bovis, Mycobacterium bovis  
BCG. The subject of the present invention is also a method for detecting  
the sequences in question by the products of expression of these  
sequences and the kits for carrying out these methods. Finally, the  
subject of the present invention is novel vaccines.

L11 ANSWER 2 OF 59 USPATFULL on STN

AN 2006:131089 USPATFULL

TI Method of dna testing for mycobacterium paratuberculosis strains

IN Collins, Desmond Michael, Upper Hutt, NEW ZEALAND

PI US 2006110729 A1 20060525

AI US 2003-509708 A1 20030610 (10)

WO 2003-NZ119 20030610  
20050909 PCT 371 date

PRAI NZ 2002-519469 20020610

DT Utility

FS APPLICATION  
LREP KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR,  
IRVINE, CA, 92614, US  
CLMN Number of Claims: 31  
ECL Exemplary Claim: 1  
DRWN 6 Drawing Page(s)  
LN.CNT 952  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to the discovery of a DNA sequence in  
sheep types of M. paratuberculosis that differs from the homologous  
sequence in cattle types of M. paratuberculosis. The invention also  
provides a nucleic acid amplification technique based on these  
differences that can be used to distinguish strains of the cattle type  
from strains of both the sheep types of M. paratuberculosis. The  
invention also relates to use of these sequences in a nucleic acid  
amplification technique to distinguish all strains of M.  
paratuberculosis from other strains of the MAI complex and from strains  
of the M. tuberculosis complex.

L11 ANSWER 3 OF 59 USPATFULL on STN  
AN 2006:3876 USPATFULL  
TI Preparation of defined highly labeled probes  
IN Puskas, Robert Steven, Manchester, MO, UNITED STATES  
PA Singulex, Inc. (U.S. corporation)  
PI US 2006003333 A1 20060105  
AI US 2003-718194 A1 20031119 (10)  
PRAI US 2002-427232P 20021119 (60)  
US 2002-427233P 20021119 (60)  
US 2002-427234P 20021119 (60)  
DT Utility  
FS APPLICATION  
LREP SONNENSCHN NATH & ROSENTHAL LLP, P.O. BOX 061080, WACKER DRIVE  
STATION, SEARS TOWER, CHICAGO, IL, 60606-1080, US  
CLMN Number of Claims: 72  
ECL Exemplary Claim: 1  
DRWN 6 Drawing Page(s)  
LN.CNT 2312

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB A method for producing a single-stranded unitized nucleic acid probe  
comprising the acts of: (a) contacting an oligonucleotide primer  
having a 5' recognition end having a length of between about 6 to 50  
nucleotides and having a 3' priming end having a length of between about  
6 to 50 nucleotides with a fixed-size template having a length between  
101 and about 10,000 nucleotides under reaction conditions conducive to  
transcribing a unitized transcript from the fixed-size template; and (b)  
labeling the unitized transcript with at least one detectable molecule,  
thereby producing a unitized nucleic acid probe.

L11 ANSWER 4 OF 59 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
DUPLICATE 1  
AN 2006:259247 BIOSIS  
DN PREV200600258833  
TI Direct identification of slowly growing Mycobacterium species by analysis  
of the intergenic 16S-23S rDNA spacer region (ISR) using a GelCompar II  
database containing sequence based optimization for restriction fragment  
site polymorphisms (RFLPs) for 12 enzymes.  
AU Gurtler, Volker [Reprint Author]; Harford, Cate; Bywater, Judy; Mayall,  
Bamie C.  
CS Austin Hlth, Dept Microbiol, Studley Rd, Heidelberg, Vic 3084, Australia  
Volker.Gurtler@austin.org.au  
SO Journal of Microbiological Methods, (FEB 2006) Vol. 64, No. 2, pp.  
185-199.  
CODEN: JMIMDQ. ISSN: 0167-7012.  
DT Article

LA English  
ED Entered STN: 3 May 2006  
Last Updated on STN: 3 May 2006  
AB To obtain Mycobacterium species identification directly from clinical specimens and cultures, the 16S-23S rDNA spacer (ISR) was amplified using previously published primers [Roth, A., Reischl, U., Streubel, A., Naumann, L., Kroppenstedt, R. M., Habicht, M., Fischer, M. and Mauch, H. (2000a). Novel diagnostic algorithm for identification of mycobacteria using genus-specific amplification of the 16S-23S rRNA gene spacer and restriction endonucleases. J. Clin. Microbiol. 38, 1094-1104.] that detect all Mycobacterium species. The restriction enzyme that could potentially produce the most restriction fragment length polymorphisms (RFLPs) was determined from all available ISR DNA sequences in GenBank to produce a novel data set of RFLPs for 31 slowly growing Mycobacterium species. Subsequently a GelCompar II database was constructed from RFLPs for 10 enzymes that have been used in the literature to differentiate slowly growing Mycobacterium species. The combination of Sau96I and HaeIII were the best choice of enzymes for differentiating clinically relevant slowly growing Mycobacterium species. A total of 392 specimens were studied by PCR with 195 negative and 197 positive specimens. The ISR-PCR product was digested with HaeIII (previously reported) and Sau96I (new to this study) to obtain a Mycobacterium species identification based on the ISR-RFLPs. The species identification obtained by ISR-RFLP was confirmed by DNA sequencing (isolate numbers are shown in parentheses) for M. avium (3), M. intracellulare (4), U. avium complex (1), M. gordonae (2) and M. tuberculosis (1). The total number of specimens (99) identified were from culture (67). Bactec (TM), 12B culture bottles (H), EDTA blood (3), directly from smear positive specimens (13), tissue (4) and urine (1). Direct species identification was obtained from all 13/13 smear positive specimens. The total number of specimens (99) were identified as M. tuberculosis (4 1), M. avium (7), M. avium complex (11), M. intracellulare MIN-A (20), M. flavescens (2), M. fortuitum (10), M. gordonae (4), M. shimoidei (1), M. ulcerans (1) and M. chelonae (2). This method reduces the time taken for Mycobacterium species identification from 8-10 weeks for culture and biochemical identification; to 4-6 weeks for culture and ISR-RFLP; to 2 days for smear-positive specimens by ISR-RFLP.  
. The precise 2 day identification obtained may provide significant advantages in clinical management. (c) 2005 Elsevier B.V. All rights reserved.

L11 ANSWER 5 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2  
AN 2005:497348 CAPLUS  
DN 143:39117  
TI Methods for detecting pathogenic mycobacteria in clinical specimens by amplification of intergenic region between mmaA1 and mmaA2 genes  
IN Das, Rakha Hari; Kumar, Ajay; Singh, Meghpati  
PA India  
SO U.S. Pat. Appl. Publ., 23 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005123928	A1	20050609	US 2003-725994	20031203
	WO 2005056831	A1	20050623	WO 2003-IB5767	20031209
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003288577 A1 20050629 AU 2003-288577 20031209

PRAI US 2003-725994 A 20031203

WO 2003-IB5767 A 20031209

AB The present invention relates to detection of pathogenic mycobacteria in clin. specimens such as sputum, cerebrospinal fluid, gastric lavage and tissue biopsies. Methods for extraction of genomic DNA and amplification of intergenic region between Me mycolic acid synthase genes mmaA1 and mmaA2 and the flanking region in mmaA1 and mmaA2 genes are presented.

L11 ANSWER 6 OF 59 USPATFULL on STN

AN 2005:305853 USPATFULL

TI High resolution typing system for pathogenic Mycobacterium tuberculosis

IN Keim, Paul S., Flagstaff, AZ, UNITED STATES

Spurgiesz, Robert Scott, Flagstaff, AZ, UNITED STATES

Schupp, James M., Flagstaff, AZ, UNITED STATES

PI US 2005266492 A1 20051201

AI US 2005-181587 A1 20050713 (11)

RLI Division of Ser. No. US 2003-624714, filed on 21 Jul 2003, PENDING

PRAI US 2002-397224P 20020719 (60)

DT Utility

FS APPLICATION

LREP QUARLES & BRADY LLP, RENAISSANCE ONE, TWO NORTH CENTRAL AVENUE, PHOENIX, AZ, 85004-2391, US

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s)

LN.CNT 1244

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB MLVA methods for strain discrimination among Mycobacterium tuberculosis strains are disclosed. Nine VNTR loci have been identified from genomic sequences of Mycobacterium tuberculosis strains and primer pairs suitable for amplifying the VNTR by PCR are disclosed. Polymorphisms at these loci were used to resolve genotypes into distinct groups. This sub-typing scheme is useful for the epidemiological study of Mycobacterium tuberculosis and may be applied to the local detection of the pathological causative agent of tuberculosis.

L11 ANSWER 7 OF 59 USPATFULL on STN

AN 2005:298897 USPATFULL

TI Oligonucleotides for use in determining the presence of human papilloma virus in a test sample

IN Gordon, Patricia, San Diego, CA, UNITED STATES

Carter, Nick M., San Diego, CA, UNITED STATES

Brentano, Steven T., Santee, CA, UNITED STATES

Hammond, Philip W., Boulder, CO, UNITED STATES

PI US 2005260562 A1 20051124

AI US 2003-607416 A1 20030626 (10)

RLI Continuation of Ser. No. US 2003-601913, filed on 23 Jun 2003, PENDING

Continuation of Ser. No. US 1996-749955, filed on 14 Nov 1996, GRANTED,  
Pat. No. US 6583278

PRAI US 1995-6854P 19951115 (60)

DT Utility

FS APPLICATION

LREP GEN PROBE INCORPORATED, 10210 GENETIC CENTER DRIVE, SAN DIEGO, CA, 92121, US

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 2 Drawing Page(s)

LN.CNT 2308

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention describes oligonucleotides targeted to HPV Type 16 and/or Type 18 nucleic acid sequences which are particularly useful to aid in detecting HPV type 16 and or 18. The oligonucleotides can aid in detecting HPV Type 16 and/or Type 18 in different ways such as by acting as hybridization assay probes, helper probes, and/or amplification primers.

L11 ANSWER 8 OF 59 USPATFULL on STN

AN 2005:274544 USPATFULL

TI Method for amplifying nucleic acid sequence

IN Mukai, Hiroyuki, Shiga, JAPAN

Sagawa, Hiroaki, Shiga, JAPAN

Uemori, Takashi, Shiga, JAPAN

Yamamoto, Junko, Shiga, JAPAN

Tomono, Jun, Shiga, JAPAN

Kobayashi, Eiji, Shiga, JAPAN

Enoki, Tatsuji, Shiga, JAPAN

Takeda, Osamu, Shiga, JAPAN

Miyake, Kazue, Kyoto, JAPAN

Sato, Yoshimi, Shiga, JAPAN

Moriyama, Mariko, Kyoto, JAPAN

Sawaragi, Haruhisa, Shiga, JAPAN

Hagiya, Michio, Shiga, JAPAN

Asada, Kiyozo, Shiga, JAPAN

Kato, Ikunoshin, Kyoto, JAPAN

PA TAKARA BIO INC., Shiga, JAPAN (non-U.S. corporation)

PI US 2005239100 A1 20051027

AI US 2004-973919 A1 20041027 (10)

RLI Continuation of Ser. No. US 2001-935338, filed on 23 Aug 2001, PENDING  
Continuation-in-part of Ser. No. WO 2000-JP1534, filed on 14 Mar 2000,  
UNKNOWN

PRAI JP 1999-76966 19990319

JP 1999-370035 19991227

JP 2000-251981 20000823

JP 2000-284419 20000919

JP 2000-288750 20000922

JP 2001-104191 20010403

DT Utility

FS APPLICATION

LREP BROWDY AND NEIMARK, P.L.L.C., 624 NINTH STREET, NW, SUITE 300,  
WASHINGTON, DC, 20001-5303, US

CLMN Number of Claims: 72

ECL Exemplary Claim: 1

DRWN 31 Drawing Page(s)

LN.CNT 10745

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A convenient and effective method for amplifying a nucleic acid sequence characterized by effecting a DNA synthesis reaction in the presence of chimeric oligonucleotide primers; a method for supplying a large amount of DNA amplification fragments; an effective method for amplifying a nucleic acid sequence by combining the above method with another nucleic acid sequence amplification method; a method for detecting a nucleic acid sequence for detecting or quantitating a microorganism such as a virus, a bacterium, a fungus or a yeast; and a method for detecting a DNA amplification fragment obtained by the above method in situ.

L11 ANSWER 9 OF 59 USPATFULL on STN

AN 2005:247575 USPATFULL

TI Molecular diagnosis of atypical Mycobacterial infections

IN Madhusudhan, Kunapuli T., Ames, IA, UNITED STATES

PI US 2005214770 A1 20050929

US 7074568 B2 20060711

AI US 2003-692905 A1 20031025 (10)  
 PRAI US 2002-421451P 20021026 (60)  
 DT Utility  
 FS APPLICATION  
 LREP ANGELA FOSTER, PHD, ESQ., 2906 BIRCHWOOD COURT, NORTH BRUNSWICK, NJ,  
 08902-3933, US  
 CLMN Number of Claims: 46  
 ECL Exemplary Claim: 1  
 DRWN 4 Drawing Page(s)  
 LN.CNT 1210  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention provides methods for diagnosing mycobacteria other  
 than tuberculosis (MOTT) infections in patients comprising amplifying  
 the internal transcribed spacer sequence (ITSS) of 16S-23S rDNA of MOTT  
 with primers that amplify MOTT but not Mycobacteria  
 Tuberculosis (MTB). The present invention also provides a method for  
 differentiating between MOTT and MTB infections comprising amplifying  
 MOTT with primers that amplify MOTT but not MTB; amplifying  
 MTB with primers that amplify MTB but not MOTT; and detecting  
 approximately 130 base pair product indicative of MOTT and approximately  
 180 base pair product indicative of MTB.

L11 ANSWER 10 OF 59 USPATFULL on STN  
 AN 2005:151257 USPATFULL  
 TI Method for detecting microorganisms  
 IN Romond, Pierre-Charles, Orcet, FRANCE  
 Renaud, Michel, Le Cendre, FRANCE  
 Renaud, Johanne, Clermont Ferrand, FRANCE legal representative  
 Renaud, Mathias, Plougastel, FRANCE legal representative  
 Alric, Monique, Clermont-Ferrand, FRANCE  
 Meiniel, Olivier, Cournon d'Auvergne, FRANCE  
 Ballut, Lionel, Chamaliere, FRANCE  
 PA UNIVERSITE D'AUVERGNE, Clermont-Ferrand, FRANCE, 63000 (non-U.S.  
 corporation)  
 DIGESTAR, Saint-Beauzine, FRANCE, 63360 (non-U.S. corporation)  
 PI US 2005130169 A1 20050616  
 AI US 2003-722555 A1 20031128 (10)  
 RLI Continuation of Ser. No. US 333338, ABANDONED A 371 of International  
 Ser. No. WO 2001-FR2371, filed on 20 Jul 2001  
 PRAI FR 2000-9600 20000721  
 FR 2000-12524 20001002  
 DT Utility  
 FS APPLICATION  
 LREP OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET,  
 ALEXANDRIA, VA, 22314, US  
 CLMN Number of Claims: 16  
 ECL Exemplary Claim: 1  
 DRWN 6 Drawing Page(s)  
 LN.CNT 2104  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The invention concerns a method for detecting micro-organisms  
 constituting a flora of micro-organisms, whereof at least part of the  
 elements has a common operon. The invention is characterised in that it  
 consists in identifying the elements of said flora by studying the  
 intergenetic sequence of said operon, and the support exhibiting nucleic  
 acids capable of hybridizing said intergenetic sequence.

L11 ANSWER 11 OF 59 USPATFULL on STN  
 AN 2005:144275 USPATFULL  
 TI Whole cell engineering by mutagenizing a substantial portion of a  
 starting genome combining mutations and optionally repeating  
 IN Short, Jay M, Rancho Santa Fe, CA, UNITED STATES  
 Fu, Pengcheng, Lowrey Avenue, HI, UNITED STATES  
 Wei, Jing, San Diego, CA, UNITED STATES

Levin, Michael, San Diego, CA, UNITED STATES  
Latterich, Martin, Montellano Terrace, San Diego, CA, UNITED STATES

PI US 2005124010 A1 20050609  
AI US 2003-398271 A1 20011001 (10)  
WO 2001-US31004 20011001  
PRAI US 2000-9677584 20000930  
US 2003-279702P 20010328 (60)

DT Utility  
FS APPLICATION  
LREP FISH & RICHARDSON, PC, 12390 EL CAMINO REAL, SAN DIEGO, CA, 92130-2081,  
US

CLMN Number of Claims: 179  
ECL Exemplary Claim: 1  
DRWN 31 Drawing Page(s)  
LN.CNT 31291

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to the field of cellular and whole organism  
engineering. Specifically, this invention relates to a cellular  
transformation, directed evolution, and screening method for creating  
novel transgenic organisms having desirable properties. Thus in one  
aspect, this invention relates to a method of generating a transgenic  
organism, such as a microbe or a plant, having a plurality of traits  
that are differentially activatable.

L11 ANSWER 12 OF 59 USPATFULL on STN  
AN 2005:144215 USPATFULL  
TI Method for amplifying nucleic acid sequence  
IN Mukai, Hiroyuki, Shiga, JAPAN  
Sagawa, Hiroaki, Shiga, JAPAN  
Uemori, Takashi, Shiga, JAPAN  
Yamamoto, Junko, Shiga, JAPAN  
Tomono, Jun, Shiga, JAPAN  
Kobayashi, Eiji, Shiga, JAPAN  
Enoki, Tatsuji, Shiga, JAPAN  
Takeda, Osamu, Shiga, JAPAN  
Miyake, Kazue, Kyoto, JAPAN  
Sato, Yoshimi, Shiga, JAPAN  
Moriyama, Mariko, Kyoto, JAPAN  
Sawaragi, Haruhisa, Shiga, JAPAN  
Hagiya, Michio, Shiga, JAPAN  
Asada, Kiyozo, Shiga, JAPAN  
Kato, Ikunoshin, Kyoto, JAPAN  
PA TAKARA BIO NIC., Shiga, JAPAN (non-U.S. corporation)  
PI US 2005123950 A1 20050609  
AI US 2004-929759 A1 20040831 (10)  
RLI Division of Ser. No. US 2001-935338, filed on 23 Aug 2001, PENDING  
Continuation-in-part of Ser. No. WO 2000-JP1534, filed on 14 Mar 2000,  
UNKNOWN  
PRAI JP 1999-76966 19990319  
JP 1999-370035 19991227  
JP 2000-251981 20000823  
JP 2000-284419 20000919  
JP 2000-288750 20000922  
JP 2001-104191 20010403

DT Utility  
FS APPLICATION  
LREP BROWDY AND NEIMARK, P.L.L.C., 624 NINTH STREET, NW, SUITE 300,  
WASHINGTON, DC, 20001-5303, US

CLMN Number of Claims: 23  
ECL Exemplary Claim: 1  
DRWN 31 Drawing Page(s)  
LN.CNT 10474

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A convenient and effective method for amplifying a nucleic acid sequence

characterized by effecting a DNA synthesis reaction in the presence of chimeric oligonucleotide primers; a method for supplying a large amount of DNA amplification fragments; an effective method for amplifying a nucleic acid sequence by combining the above method with another nucleic acid sequence amplification method; a method for detecting a nucleic acid sequence for detecting or quantitating a microorganism such as a virus, a bacterium, a fungus or a yeast; and a method for detecting a DNA amplification fragment obtained by the above method in situ.

L11 ANSWER 13 OF 59 USPATFULL on STN

AN 2005:68861 USPATFULL

TI Method of stabilizing reagent for amplifying or detecting nucleic acid and storage method

IN Sagawa, Hiroaki, Kusatsu-shi, JAPAN  
Uemori, Takashi, Otsu-shi, JAPAN  
Mukai, Hiroyuki, Moriyama-shi, JAPAN  
Yamamoto, Junko, Moriyama-shi, JAPAN  
Tomono, Jun, Kusatsu-shi, JAPAN  
Kobayashi, Eiji, Otsu-shi, JAPAN  
Enoki, Tatsuji, Otsu-shi, JAPAN  
Asada, Kiyozo, Koka-gun, JAPAN  
Kato, Ikunoshin, Koka-gun, JAPAN

PI US 2005059000 A1 20050317

AI US 2003-478633 A1 20031125 (10)

WO 2002-JP5832 20020612

PRAI JP 2001-177737 20010612

DT Utility

FS APPLICATION

LREP BROWDY AND NEIMARK, P.L.L.C., 624 NINTH STREET, NW, SUITE 300,  
WASHINGTON, DC, 20001-5303

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN 7 Drawing Page(s)

LN.CNT 4503

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of stabilizing a reaction reagent for highly sensitively and specifically amplifying a target nucleic acid in a sample with the use of a chimeric oligonucleotide primer and a method of storing the same over a long time; and a method of highly sensitively detecting a pathogenic microorganism and a virus.

L11 ANSWER 14 OF 59 USPATFULL on STN

AN 2005:30785 USPATFULL

TI Compositions and methods for detecting multidrug resistant strains of M. tuberculosis having mutations in genes of the mutT family

IN Gicquel, Brigitte, Paris, FRANCE

PI US 2005026216 A1 20050203

AI US 2004-777131 A1 20040213 (10)

RLI Continuation of Ser. No. WO 2002-EP9679, filed on 14 Aug 2002, UNKNOWN

PRAI US 2001-311824P 20010814 (60)

US 2001-313523P 20010821 (60)

DT Utility

FS APPLICATION

LREP Finnegan, Henderson, Farabow, , Garrett & Dunner, L.L.P., 1300 I Street,  
N.W., Washington, DC, 20005-3315

CLMN Number of Claims: 45

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 1775

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention pertains to polynucleotides derived from M. tuberculosis genes imparting resistance to antibiotics and chemically related compounds. This invention also relates to the use of the

polynucleotides as oligonucleotide primers or probes for detecting M. tuberculosis strains that are resistant to antibiotics and related compounds in a biological sample. Kits containing the primers and probes are also provided.

L11 ANSWER 15 OF 59 USPATFULL on STN

AN 2005:16756 USPATFULL

TI Primers for amplifying hsp 65 gene of mycobacterial species, hsp 65 gene fragments and method of identifying mycobacterial species with the same

IN Kim, Bum-Joon, Jeju-do, KOREA, REPUBLIC OF

Kook, Yoon-Ho, Seoul, KOREA, REPUBLIC OF

Kim, Jeong-Mi, Seoul, KOREA, REPUBLIC OF

PI US 2005014157 A1 20050120

AI US 2004-500586 A1 20040909 (10)

WO 2003-KR131 20030121

PRAI KR 2002-4297 20020124

KR 20020305

DT Utility

FS APPLICATION

LREP ALSTON & BIRD LLP, BANK OF AMERICA PLAZA, 101 SOUTH TRYON STREET, SUITE 4000, CHARLOTTE, NC, 28280-4000

CLMN Number of Claims: 16

ECL Exemplary Claim: 1

DRWN 8 Drawing Page(s)

LN.CNT 2057

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a pair of primers specific to mycobacterial species, a polynucleotide of an hsp 65 gene fragment, and a method for the identification of mycobacterial species by using the same. More specifically, the 604-bp hsp 65 gene fragment can be applied to identification methods of mycobacteria such as the comparative sequence analysis method, the probe hybridization method, and PCR-RFLP, which can resolve the problems of a conventional identification method based on bio-chemical characteristics, where the genus mycobacterium covers various species and has a low growth rate, and of the problems of 16s rDNA. Thus, according to the identification method of the present invention, the mycobacterial species can be identified simply, economically, and accurately.

L11 ANSWER 16 OF 59 USPATFULL on STN

AN 2005:250256 USPATFULL

TI rpoB gene fragments and a method for the diagnosis and identification of Mycobacterium tuberculosis and non-tuberculosis Mycobacterial strains

IN Lee, Hyeyoung, No. 190-1106, Woosung APT., Yangjae-1-dong, Seocho-ku, Seoul, KOREA, REPUBLIC OF

Park, Young Kil, Seongnam-si, KOREA, REPUBLIC OF

Bai, Gill-Han, Seongnam-si, KOREA, REPUBLIC OF

Kim, Sang-Jae, Seoul, KOREA, REPUBLIC OF

Cho, Sang-Nae, No. 310-103, Seonsoochon APT., 89, Banglee-dong,

Songpa-ku, Seoul, KOREA, REPUBLIC OF

Kim, Yeun, Pajoo-si, KOREA, REPUBLIC OF

Park, Hee Jung, Seoul, KOREA, REPUBLIC OF

PA Cho, Sang-Nae, Seoul, KOREA, REPUBLIC OF (non-U.S. individual)

Lee, Hyeyoung, Kangwon-do, KOREA, REPUBLIC OF (non-U.S. individual)

PI US 6951718 B1 20051004

AI US 2000-697123 20001027 (9)

PRAI KR 1999-46795 19991027

DT Utility

FS GRANTED

EXNAM Primary Examiner: Myers, Carla J.; Assistant Examiner: Johannsen, Diana

LREP Nixon & Vanderhye, P.C.

CLMN Number of Claims: 3

ECL Exemplary Claim: 1  
DRWN 15 Drawing Figure(s); 11 Drawing Page(s)  
LN.CNT 1164

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is related to rpoB gene fragments and method for the diagnosis and identification of Mycobacterium tuberculosis and non-tuberculous Mycobacterial strains using rpoB gene and its fragments.

L11 ANSWER 17 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3

AN 2005:1291726 CAPLUS

DN 145:21812

TI Direct detection and identification of Mycobacterium tuberculosis and Mycobacterium bovis in bovine samples by a novel nested PCR assay: correlation with conventional techniques

AU Mishra, A.; Singhal, A.; Chauhan, D. S.; Katoch, V. M.; Srivastava, K.; Thakral, S. S.; Bharadwaj, S. S.; Sreenivas, V.; Prasad, H. K.

CS Department of Biotechnology, All India Institute of Medical Sciences, New Delhi, 110029, India

SO Journal of Clinical Microbiology (2005), 43(11), 5670-5678

CODEN: JCMIDW; ISSN: 0095-1137

PB American Society for Microbiology

DT Journal

LA English

AB Mycobacterium tuberculosis and M. bovis infect animals and humans. Their epidemiol. in developed and developing countries differ, owing to differences in the implementation of preventive measures (World Health Organization, 1999). Identification and differentiation of these closely related mycobacterial species would help to determine the source, reservoirs of infection, and disease burden due to diverse mycobacterial pathogens. The utility of the hupB gene (Rv2986c in M. tuberculosis, or Mb3010c in M. bovis) to differentiate M. tuberculosis and M. bovis was evaluated by a PCR-restriction fragment length polymorphism (RFLP) assay with 56 characterized bovine isolates (S. Prabhakar et al., J. Clin. Microbiol. 42:2724-2732, 2004). The degree of concordance between the PCR-RFLP assay and the microbiol. characterization was 99.0% (P < 0.001). A nested PCR (N-PCR) assay was developed, replacing the PCR-RFLP assay for direct detection of M. tuberculosis and M. bovis in bovine samples. The N-PCR products of M. tuberculosis and M. bovis corresponded to 116 and 89 bp, resp. The detection limit of mycobacterial DNA by N-PCR was 50 fg, equivalent to five tubercle bacilli. M. tuberculosis and/or M. bovis was detected in 55.5% (105/189) of the samples by N-PCR, compared to 9.4% (18/189) by culture. The sensitivities of N-PCR and culture were 97.3 and 29.7, resp., and their specificities were 22.2 and 77.7%, resp. The percentages of animals or samples identified as infected with M. tuberculosis or M. bovis by N-PCR and culture reflected the clin. categorizations of the cattle (P of <0.05 to <0.01). Mixed infection by N-PCR was detected in 22 animals, whereas by culture mixed infection was detected in 1 animal.

RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 18 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:494292 CAPLUS

DN 143:167284

TI Detection by denaturing gradient gel electrophoresis of pncA mutations associated with pyrazinamide resistance in Mycobacterium tuberculosis isolates from the United States-Mexico border region

AU McCammon, Mark T.; Gillette, John S.; Thomas, Derek P.; Ramaswamy, Srinivas V.; Rosas, Ishmael I.; Graviss, Edward A.; Vijg, Jan; Quitugua, Teresa N.

CS Department of Microbiology and Immunology, University of Texas Health Science Center at San Antonio, San Antonio, TX, USA

SO Antimicrobial Agents and Chemotherapy (2005), 49(6), 2210-2217  
 CODEN: AMACCQ; ISSN: 0066-4804  
 PB American Society for Microbiology  
 DT Journal  
 LA English  
 AB Denaturing gradient gel electrophoresis (DGGE) was used to probe for mutations associated with pyrazinamide (PZA) resistance in the *pncA* gene of *Mycobacterium tuberculosis*. DGGE scans for mutations across large regions of DNA and rivals sequencing in its ability to detect DNA alterations. Specific mutations can often be recognized by their characteristic denaturation pattern, which serves as a mol. fingerprint. Five PCR target fragments were designed to scan for DNA alterations across 600 bp of *pncA* in 181 *M. tuberculosis* isolates from patients residing in the U.S-Mexico border states of Texas and Tamaulipas, resp. A region of *pncA* was observed with a high GC content and a melting temperature approaching 90°C that was initially refractory to denaturation, and a DGGE target fragment was specifically designed to detect mutations in this region. DGGE detected *pncA* mutations in 82 of 83 PZA-resistant isolates. By contrast, only 1 of 98 PZA-susceptible isolates harbored a detectable DNA alteration. The *pncA* gene was sequenced from 41 isolates, and 32 DNA alterations in 32 PZA-resistant isolates were identified, including 11 new mutations. DGGE also detected nine isolates whose susceptibility to PZA appeared to be incorrect, and DNA sequencing confirmed these apparent errors in drug susceptibility testing. These results demonstrate the power and usefulness of DGGE in detecting mutations associated with PZA resistance in *M. tuberculosis*.  
 RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 19 OF 59 USPATFULL on STN  
 AN 2004:306983 USPATFULL  
 TI Cytological specimen loaded filter paper and an efficient method of using said paper for dry collection, transportation, and storage to screen for infection using PCR  
 IN Das, Bhudev C., New Delhi, INDIA  
 Hedau, Suresh, New Delhi, INDIA  
 Gopalkrishna, V., New Delhi, INDIA  
 Katiyar, Sanjay, New Delhi, INDIA  
 Kailash, U., New Delhi, INDIA  
 PA Indian Council of Medical Research, New Delhi, INDIA, 110 002 (non-U.S. corporation)  
 PI US 2004241654 A1 20041202  
 AI US 2003-444988 A1 20030527 (10)  
 DT Utility  
 FS APPLICATION  
 LREP OLIFF & BERRIDGE, PLC, P.O. BOX 19928, ALEXANDRIA, VA, 22320  
 CLMN Number of Claims: 17  
 ECL Exemplary Claim: 1  
 DRWN 2 Drawing Page(s)  
 LN.CNT 814  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention relates to a cytological specimen loaded filter paper useful for dry collection, transportation, and storage of cytological specimens at temperature ranging between 4° C. to 50° C. to screen for identification of gene sequence of pathogens responsible for infection using PCR, wherein the said loaded-paper is workable for about fifteen years from the time of loading for large scale screening especially for population from distant places, and also, a simple, rapid, safe, and cost-effective filter-paper method of dry collection, transportation, and storage of cytological specimens at temperature ranging between 4° C. to 50° C. to screen for pathogenic genomes and cellular genes using PCR.  
 L11 ANSWER 20 OF 59 USPATFULL on STN

AN 2004:215406 USPATFULL  
TI Detection of target molecules through interaction with probes  
IN Puskas, Robert Steven, Manchester, MO, UNITED STATES  
PA Singulex, Inc. (U.S. corporation)  
PI US 2004166514 A1 20040826  
AI US 2003-720044 A1 20031119 (10)  
PRAI US 2002-427233P 20021119 (60)  
US 2002-427234P 20021119 (60)  
US 2002-427232P 20021119 (60)  
DT Utility  
FS APPLICATION  
LREP SONNENSCHN NATH & ROSENTHAL LLP, P.O. BOX 061080, WACKER DRIVE  
STATION, SEARS TOWER, CHICAGO, IL, 60606-1080  
CLMN Number of Claims: 57  
ECL Exemplary Claim: 1  
DRWN 7 Drawing Page(s)  
LN.CNT 2134

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for detecting a target nucleic acid molecule or target nucleic acid molecular complex comprising: (a) contacting two or more probes complementary to the molecule or molecular complex, said molecule or molecular complex being labeled with one or more fluorescent dye molecules of the same dye or labeled with two dyes that are indistinguishable by their emission characteristics in an assay instrument, wherein each probe interacts specifically with a different target nucleic acid sequence or a structure on the molecule or molecular complex; and (b) detecting interaction of the probes with the molecule or molecular complex, said interaction being detected by an increase in fluorescence intensity during a detection interval having a fluorescence intensity above the fluorescence intensity of any individual free probe, wherein molecule or molecular complex is analyzed such that only individual molecules or molecular complexes in contact with a probe are within an interrogation volume and within a detection time interval.

L11 ANSWER 21 OF 59 USPATFULL on STN

AN 2004:158567 USPATFULL  
TI High resolution typing system for pathogenic Mycobacterium tuberculosis  
IN Keim, Paul S., Flagstaff, AZ, UNITED STATES  
Spurgiesz, Robert Scott, Flagstaff, AZ, UNITED STATES  
Schupp, James M., Flagstaff, AZ, UNITED STATES  
PI US 2004121366 A1 20040624  
US 7026467 B2 20060411  
AI US 2003-624714 A1 20030721 (10)  
PRAI US 2002-397224P 20020719 (60)  
DT Utility  
FS APPLICATION  
LREP QUARLES & BRADY LLP, RENAISSANCE ONE, TWO NORTH CENTRAL AVENUE, PHOENIX,  
AZ, 85004-2391  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Page(s)  
LN.CNT 1061

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB MLVA methods for strain discrimination among Mycobacterium tuberculosis strains are disclosed. Nine VNTR loci have been identified from genomic sequences of Mycobacterium tuberculosis strains and primer pairs suitable for amplifying the VNTR by PCR are disclosed. Polymorphisms at these loci were used to resolve genotypes into distinct groups. This sub-typing scheme is useful for the epidemiological study of Mycobacterium tuberculosis and may be applied to the local detection of the pathological causative agent of tuberculosis.

L11 ANSWER 22 OF 59 USPATFULL on STN

AN 2004:50804 USPATFULL

TI Diagnosis kit for mycobacterium species identification and  
drug-resistance detection and manufacturing method thereof  
IN Kim, Hyung-Jung, Gyeonggi-do, KOREA, REPUBLIC OF  
Kim, Na Young, Seoul, KOREA, REPUBLIC OF  
Yoon, Sung Wook, Seoul, KOREA, REPUBLIC OF  
Kim, Jeong Mi, Seoul, KOREA, REPUBLIC OF  
Park, Mi Sun, Busan, KOREA, REPUBLIC OF  
PI US 2004038233 A1 20040226  
AI US 2003-297134 A1 20030707 (10)  
WO 2001-KR904 20010530  
PRAI KR 2000-29369 20000530  
DT Utility  
FS APPLICATION  
LREP Frank Chau, F Chau & Associates, Suite 501, 1900 Hempstead Turnpike,  
East Meadow, NY, 11554  
CLMN Number of Claims: 30  
ECL Exemplary Claim: 1  
DRWN 9 Drawing Page(s)  
LN.CNT 1586

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to diagnosis kit for Mycobacterium species  
identification and drug-resistance detection and manufacturing method  
thereof, which can discriminate a Mycobacterium Tuberculosis rpoB gene  
point mutation relating to the Mycobacterium species identification and  
drug-resistance swiftly, exactly and in large quantities using an  
oligonucleotide chip. The diagnosis kit for Mycobacterium species  
identification and drug-resistance detection in accordance with the  
present invention consists of an oligonucleotide chip including a  
Mycobacterium tuberculosis complex probe, a Mycobacterium species  
identification probe and a drug-resistance detection probe of a  
Mycobacterium tuberculosis rpoB gene, and a fluorescent material  
containing a biotin-binding protein so as to detect hybridization of  
amplified products of a specimen marked as biotine and the corresponding  
probe.

L11 ANSWER 23 OF 59 USPATFULL on STN

AN 2004:24700 USPATFULL  
TI Oligonucleotides for use in determining the presence of human papilloma  
virus in a test sample  
IN Gordon, Patricia, San Diego, CA, UNITED STATES  
Carter, Nick M., San Diego, CA, UNITED STATES  
Brentano, Steven T., Santee, CA, UNITED STATES  
Hammond, Philip W., Boulder, CO, UNITED STATES  
PI US 2004018539 A1 20040129  
AI US 2003-601913 A1 20030623 (10)  
RLI Continuation of Ser. No. US 1996-749955, filed on 14 Nov 1996, GRANTED,  
Pat. No. US 6583278  
PRAI US 1995-6854P 19951115 (60)  
DT Utility  
FS APPLICATION  
LREP GEN PROBE INCORPORATED, 10210 GENETIC CENTER DRIVE, SAN DIEGO, CA, 92121  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Page(s)  
LN.CNT 2489

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention describes oligonucleotides targeted to HPV Type 16  
and/or Type 18 nucleic acid sequences which are particularly useful to  
aid in detecting HPV type 16 and or 18. The oligonucleotides can aid in  
detecting HPV Type 16 and/or Type 18 in different ways such as by acting  
as hybridization assay probes, helper probes, and/or amplification  
primers.

L11 ANSWER 24 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:715776 CAPLUS  
 DN 142:255259  
 TI LightCycler-based differentiation of Mycobacterium abscessus and Mycobacterium chelonae  
 AU Sedlacek, L.; Rifai, M.; Feldmann, K.; Bange, F. C.  
 CS Department of Medical Microbiology and Hospital Epidemiology, Medical School Hannover, Hannover, 30625, Germany  
 SO Journal of Clinical Microbiology (2004), 42(7), 3284-3287  
 CODEN: JCMIDW; ISSN: 0095-1137  
 PB American Society for Microbiology  
 DT Journal  
 LA English  
 AB In this study we introduce a rapid procedure to identify Mycobacterium abscessus (types I and II) and M. chelonae using LightCycler-based anal. of the hsp65 gene. Results from 36 clin. strains were compared with hsp65 gene restriction anal. and biochem. profiles of bacilli. As all three methods yielded identical results for each isolate, this procedure offers an excellent alternative to previously established nucleic acid amplification-based techniques for the diagnosis of mycobacterial diseases.

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 25 OF 59 USPATFULL on STN  
 AN 2003:258639 USPATFULL  
 TI 207 human secreted proteins  
 IN Ni, Jian, Germantown, MD, UNITED STATES  
 Ebner, Reinhard, Gaithersburg, MD, UNITED STATES  
 LaFleur, David W., Washington, DC, UNITED STATES  
 Moore, Paul A., Germantown, MD, UNITED STATES  
 Olsen, Henrik S., Gaithersburg, MD, UNITED STATES  
 Rosen, Craig A., Laytonsville, MD, UNITED STATES  
 Ruben, Steven M., Olney, MD, UNITED STATES  
 Soppet, Daniel R., Centreville, VA, UNITED STATES  
 Young, Paul E., Gaithersburg, MD, UNITED STATES  
 Shi, Yanggu, Gaithersburg, MD, UNITED STATES  
 Florence, Kimberly A., Rockville, MD, UNITED STATES  
 Wei, Ying-Fei, Berkeley, CA, UNITED STATES  
 Florence, Charles, Rockville, MD, UNITED STATES  
 Hu, Jing-Shan, Mountain View, CA, UNITED STATES  
 Li, Yi, Sunnyvale, CA, UNITED STATES  
 Kyaw, Hla, Frederick, MD, UNITED STATES  
 Fischer, Carrie L., Burke, VA, UNITED STATES  
 Ferrie, Ann M., Painted Post, NY, UNITED STATES  
 Fan, Ping, Potomac, MD, UNITED STATES  
 Feng, Ping, Gaithersburg, MD, UNITED STATES  
 Endress, Gregory A., Florence, MA, UNITED STATES  
 Dillon, Patrick J., Carlsbad, CA, UNITED STATES  
 Carter, Kenneth C., North Potomac, MD, UNITED STATES  
 Brewer, Laurie A., St. Paul, MN, UNITED STATES  
 Yu, Guo-Liang, Berkeley, CA, UNITED STATES  
 Zeng, Zhizhen, Lansdale, PA, UNITED STATES  
 Greene, John M., Gaithersburg, MD, UNITED STATES

PI US 2003181692 A1 20030925  
 AI US 2001-933767 A1 20010822 (9)  
 RLI Continuation-in-part of Ser. No. WO 2001-US5614, filed on 21 Feb 2001, PENDING Continuation-in-part of Ser. No. US 1998-205258, filed on 4 Dec 1998, PENDING

PRAI US 2000-184836P 20000224 (60)  
 US 2000-193170P 20000329 (60)  
 US 1997-48885P 19970606 (60)  
 US 1997-49375P 19970606 (60)  
 US 1997-48881P 19970606 (60)  
 US 1997-48880P 19970606 (60)

US 1997-48896P	19970606 (60)
US 1997-49020P	19970606 (60)
US 1997-48876P	19970606 (60)
US 1997-48895P	19970606 (60)
US 1997-48884P	19970606 (60)
US 1997-48894P	19970606 (60)
US 1997-48971P	19970606 (60)
US 1997-48964P	19970606 (60)
US 1997-48882P	19970606 (60)
US 1997-48899P	19970606 (60)
US 1997-48893P	19970606 (60)
US 1997-48900P	19970606 (60)
US 1997-48901P	19970606 (60)
US 1997-48892P	19970606 (60)
US 1997-48915P	19970606 (60)
US 1997-49019P	19970606 (60)
US 1997-48970P	19970606 (60)
US 1997-48972P	19970606 (60)
US 1997-48916P	19970606 (60)
US 1997-49373P	19970606 (60)
US 1997-48875P	19970606 (60)
US 1997-49374P	19970606 (60)
US 1997-48917P	19970606 (60)
US 1997-48949P	19970606 (60)
US 1997-48974P	19970606 (60)
US 1997-48883P	19970606 (60)
US 1997-48897P	19970606 (60)
US 1997-48898P	19970606 (60)
US 1997-48962P	19970606 (60)
US 1997-48963P	19970606 (60)
US 1997-48877P	19970606 (60)
US 1997-48878P	19970606 (60)
US 1997-57645P	19970905 (60)
US 1997-57642P	19970905 (60)
US 1997-57668P	19970905 (60)
US 1997-57635P	19970905 (60)
US 1997-57627P	19970905 (60)
US 1997-57667P	19970905 (60)
US 1997-57666P	19970905 (60)
US 1997-57764P	19970905 (60)
US 1997-57643P	19970905 (60)
US 1997-57769P	19970905 (60)
US 1997-57763P	19970905 (60)
US 1997-57650P	19970905 (60)
US 1997-57584P	19970905 (60)
US 1997-57647P	19970905 (60)
US 1997-57661P	19970905 (60)
US 1997-57662P	19970905 (60)
US 1997-57646P	19970905 (60)
US 1997-57654P	19970905 (60)
US 1997-57651P	19970905 (60)
US 1997-57644P	19970905 (60)
US 1997-57765P	19970905 (60)
US 1997-57762P	19970905 (60)
US 1997-57775P	19970905 (60)
US 1997-57648P	19970905 (60)
US 1997-57774P	19970905 (60)
US 1997-57649P	19970905 (60)
US 1997-57770P	19970905 (60)
US 1997-57771P	19970905 (60)
US 1997-57761P	19970905 (60)
US 1997-57760P	19970905 (60)
US 1997-57776P	19970905 (60)
US 1997-57778P	19970905 (60)

US 1997-57629P            19970905 (60)  
 US 1997-57628P            19970905 (60)  
 US 1997-57777P            19970905 (60)  
 US 1997-57634P            19970905 (60)  
 US 1997-70923P            19971218 (60)  
 US 1998-92921P            19980715 (60)  
 US 1998-94657P            19980730 (60)  
 US 1997-70923P            19971218 (60)  
 US 1998-92921P            19980715 (60)  
 US 1998-94657P            19980730 (60)

DT      Utility  
 FS      APPLICATION  
 LREP    HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
 CLMN    Number of Claims: 23  
 ECL     Exemplary Claim: 1  
 DRWN    10 Drawing Page(s)  
 LN.CNT 32746  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB      The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

L11    ANSWER 26 OF 59    USPATFULL on STN  
 AN      2003:194484    USPATFULL  
 TI      Method for detection of pathogenic organisms  
 IN      Herrmann, Bjorn, Uppsala, SWEDEN  
          Kirsebom, Leif, Uppsala, SWEDEN  
          Stolt, Pelle, Uppsala, SWEDEN  
 PI      US 2003134295            A1      20030717  
 AI      US 2002-169831           A1      20021113 (10)  
          WO 2001-SE31                      20010110  
 PRAI    SE 2000-61                      20000110  
 DT      Utility  
 FS      APPLICATION  
 LREP    YOUNG & THOMPSON, 745 SOUTH 23RD STREET 2ND FLOOR, ARLINGTON, VA, 22202  
 CLMN    Number of Claims: 9  
 ECL     Exemplary Claim: 1  
 DRWN    10 Drawing Page(s)  
 LN.CNT 1149  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB      A method for detection of pathogenic organisms wherein the method includes differentiation between species. The method is especially suitable to detect and to diagnose infection by pathogenic organisms which are hard and/or laborious to detect with conventional methods. The method relies upon analysis of specific variable regions of the RNase P RNA gene, namely the P3 and/or P19 region(s).

L11    ANSWER 27 OF 59    USPATFULL on STN  
 AN      2003:187829    USPATFULL  
 TI      Compositions and methods for detecting multidrug resistant strains of M. tuberculosis having mutations in genes of the mutT family  
 IN      Gicquel, Brigitte, Paris, FRANCE  
 PI      US 2003129619            A1      20030710  
 AI      US 2002-216817           A1      20020813 (10)  
 PRAI    US 2001-311824P                      20010814 (60)  
          US 2001-313523P                      20010821 (60)  
 DT      Utility  
 FS      APPLICATION  
 LREP    FINNEGAN, HENDERSON, FARABOW, GARRETT &, DUNNER LLP, 1300 I STREET, NW, WASHINGTON, DC, 20006

CLMN Number of Claims: 45  
ECL Exemplary Claim: 1  
DRWN 15 Drawing Page(s)  
LN.CNT 1349

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention pertains to polynucleotides derived from M. tuberculosis genes imparting resistance to antibiotics and chemically related compounds. This invention also relates to the use of the polynucleotides as oligonucleotide primers or probes for detecting M. tuberculosis strains that are resistant to antibiotics and related compounds in a biological sample. Kits containing the primers and probes are also provided.

L11 ANSWER 28 OF 59 USPATFULL on STN

AN 2003:180716 USPATFULL

TI Fragments of nucleic acids specific to mycobacteria which are members of the M. tuberculosis complex and their applications for the detection and the differential diagnosis of members of the M. tuberculosis complex

IN Magdalena, Juana, Bournville, UNITED KINGDOM

Supply, Philip, Tournai, BELGIUM

Locht, Camille, Bruxelles, BELGIUM

PA Institut Pasteur De Lille (non-U.S. corporation)

PI US 2003124546 A1 20030703

AI US 2002-86206 A1 20020228 (10)

RLI Continuation of Ser. No. US 1999-242588, filed on 20 May 1999, ABANDONED  
A 371 of International Ser. No. WO 1997-FR1483, filed on 12 Aug 1997,  
UNKNOWN

PRAI FR 1996-10277 19960819

DT Utility

FS APPLICATION

LREP Charles A. Muserlian, c/o Bierman, Muserlian and Lucas, 600 Third  
Avenue, New York, NY, 10016

CLMN Number of Claims: 27

ECL Exemplary Claim: 1

DRWN 9 Drawing Page(s)

LN.CNT 1243

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A fragment of a nucleic acid specific to mycobacteria of M. tuberculosis complex having a nucleotide sequence of SEQ ID No: 1 and SEQ ID No: 2 and their complimentary sequences.

L11 ANSWER 29 OF 59 USPATFULL on STN

AN 2003:159268 USPATFULL

TI Method for identifying mycobacterium tuberculosis and mycobacteria other than tuberculosis, together with detecting resistance to an antituberculosis drug of mycobacteria obtained by mutation of rpoB gene

IN Lee, Hyeyoung, Seoul, KOREA, REPUBLIC OF

Bang, Hye Eun, Seoul, KOREA, REPUBLIC OF

Cho, Sang-Nae, Seoul, KOREA, REPUBLIC OF

Bai, Gill-Han, Seongnam-shi, KOREA, REPUBLIC OF

Kim, Sang-Jae, Seoul, KOREA, REPUBLIC OF

PA Xeniss Life Science Co., Ltd. (non-U.S. corporation)

PI US 2003108881 A1 20030612

US 6815165 B2 20041109

AI US 2002-58422 A1 20020130 (10)

PRAI KR 2001-43450 20010719

DT Utility

FS APPLICATION

LREP POWELL GOLDSTEIN FRAZER & MURPHY LLC, PO Box 97223, Washington, DC,  
20090-7223

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 7 Drawing Page(s)

LN.CNT 889

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a method for identifying Mycobacterium tuberculosis and non-tuberculosis Mycobacterium (MOTT), and for the determination of drug susceptibility of M. tuberculosis based on detection of mutations in the rpoB gene.

L11 ANSWER 30 OF 59 USPATFULL on STN

AN 2003:106170 USPATFULL

TI Method for amplifying nucleic acid sequence

IN Mukai, Hiroyuki, Shiga, JAPAN  
Sagawa, Hiroaki, Shiga, JAPAN  
Uemori, Takashi, Shiga, JAPAN  
Yamamoto, Junko, Shiga, JAPAN  
Tomono, Jun, Shiga, JAPAN  
Kobayashi, Eiji, Shiga, JAPAN  
Enoki, Tatsuji, Shiga, JAPAN  
Takeda, Osamu, Shiga, JAPAN  
Miyake, Kazue, Kyoto, JAPAN  
Sato, Yoshimi, Shiga, JAPAN  
Moriyama, Mariko, Kyoto, JAPAN  
Sawaragi, Haruhisa, Shiga, JAPAN  
Hagiya, Michio, Shiga, JAPAN  
Asada, Kiyozo, Shiga, JAPAN  
Kato, Ikunoshin, Kyoto, JAPAN

PA Takara Shuzo Co., Ltd, Kyoto-shi, JAPAN (non-U.S. corporation)

PI US 2003073081 A1 20030417

US 6951722 B2 20051004

AI US 2001-935338 A1 20010823 (9)

RLI Continuation-in-part of Ser. No. WO 2000-JP1534, filed on 14 Mar 2000, UNKNOWN

PRAI JP 1999-76966 19990319

JP 1999-370035 19991227

JP 2000-251981 20000823

JP 2000-284419 20000919

JP 2000-288750 20000922

JP 2001-104191 20010403

DT Utility

FS APPLICATION

LREP BROWDY AND NEIMARK, P.L.L.C., 624 NINTH STREET, NW, SUITE 300, WASHINGTON, DC, 20001-5303

CLMN Number of Claims: 220

ECL Exemplary Claim: 1

DRWN 31 Drawing Page(s)

LN.CNT 11844

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A convenient and effective method for amplifying a nucleic acid sequence characterized by effecting a DNA synthesis reaction in the presence of chimeric oligonucleotide primers; a method for supplying a large amount of DNA amplification fragments; an effective method for amplifying a nucleic acid sequence by combining the above method with another nucleic acid sequence amplification method; a method for detecting a nucleic acid sequence for detecting or quantitating a microorganism such as a virus, a bacterium, a fungus or a yeast; and a method for detecting a DNA amplification fragment obtained by the above method in situ.

L11 ANSWER 31 OF 59 USPATFULL on STN

AN 2003:37529 USPATFULL

TI Identification of nucleotide sequences specific for mycobacteria and development of differential diagnosis strategies for mycobacterial species

IN Gala, Jean-Luc, St.Stevens-Woluwe, BELGIUM  
Vannuffel, Pascal, Buvrinnes, BELGIUM

PI US 2003027174 A1 20030206

AI US 2002-74246 A1 20020214 (10)  
PRAI US 2001-269848P 20010221 (60)  
US 2001-292509P 20010523 (60)  
DT Utility  
FS APPLICATION  
LREP NIXON & VANDERHYE P.C., 8th Floor, 1100 North Glebe Road, Arlington, VA,  
22201  
CLMN Number of Claims: 25  
ECL Exemplary Claim: 1  
DRWN 40 Drawing Page(s)  
LN.CNT 2087

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB. The present invention relates to methods and devices for detecting and differentiating between Mycobacterium strains in a sample based upon species-specific upstream p34 gene region (us-p34) sequences. New us-p34 sequences and probes and primers derived therefrom are provided as well as methods and diagnostic kits based on the same.

L11 ANSWER 32 OF 59 USPATFULL on STN

AN 2003:169098 USPATFULL  
TI Nucleic acid probes complementary to human papilloma virus nucleic acid  
IN Carter, Nick M., San Diego, CA, United States  
PA Gen-Probe Incorporated, San Diego, CA, United States (U.S. corporation)  
PI US 6583278 B1 20030624  
AI US 1996-749955 19961114 (8)  
PRAI US 1995-6854P 19951115 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Fredman, Jeffrey  
LREP Cappellari, Charles B., Heber, Sheldon O.  
CLMN Number of Claims: 10  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Figure(s); 2 Drawing Page(s)  
LN.CNT 2623

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention describes oligonucleotides targeted to HPV Type 16 and/or Type 18 nucleic acid sequences which are particularly useful to aid in detecting HPV type 16 and or 18. The oligonucleotides can aid in detecting HPV Type 16 and/or Type 18 in different ways such as by acting as hybridization assay probes, helper probes, and/or amplification primers.

L11 ANSWER 33 OF 59 USPATFULL on STN

AN 2003:13073 USPATFULL  
TI Early detection of mycobacterial disease  
IN Laal, Suman, Croton-on-Hudson, NY, United States  
Zolla-Pazner, Susan, New York, NY, United States  
Belisle, John T., Fort Collins, CO, United States  
PA New York University, New York, NY, United States (U.S. corporation)  
Colorado State University Research Foundation, Fort Collins, CO, United States (U.S. corporation)  
PI US 6506384 B1 20030114  
AI US 1999-396347 19990914 (9)  
RLI Continuation-in-part of Ser. No. US 1997-1984, filed on 31 Dec 1997, now patented, Pat. No. US 6245331  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Swartz, Rodney P  
LREP Livnat, Shmeul, Venable, Baetjer, Howard & Civiletti  
CLMN Number of Claims: 40  
ECL Exemplary Claim: 1  
DRWN 33 Drawing Figure(s); 39 Drawing Page(s)  
LN.CNT 5685

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A number of protein and glycoprotein antigens secreted by *Mycobacterium tuberculosis* (Mt) have been identified as "early" Mt antigens on the basis early antibodies present in subjects infected with Mt prior to the development of detectable clinical disease. These early Mt antigens, in particular an 88 kDa secreted protein having a pI of about 5.2 and the sequence of SEQ ID NO:106, which is present in Mt lipoarabinomannan-free culture filtrate, a protein characterized as Mt antigen 85C; a protein characterized as Mt antigen MPT51, a glycoprotein characterized as Mt antigen MPT32; and a 49 kDa protein having a pI of about 5.1, are useful in immunoassay methods for early, rapid detection of TB in a subject. Preferred immunoassays detect the antibodies in the subject's urine. Also provided are antigenic compositions, kits and methods to useful for detecting an early Mt antigen, an early Mt antibody, and immune complexes thereof. For the first time, a surrogate marker is available for inexpensive screening of individuals at heightened risk for developing advanced TB, in particular HIV-1 infected subjects and other immunocompromised individuals.

L11 ANSWER 34 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:933752 CAPLUS

DN 140:140172

TI Detection of isoniazid and rifampin resistance in *Mycobacterium tuberculosis* strains by single-strand conformation polymorphism analysis and restriction fragment length polymorphism

AU Piana, A.; Orru, M.; Masia, M. D.; Sotgiu, G.; Muresu, E.; Maida, A.

CS Istituto di Igiene e Medicina Preventiva, University of Sassari, Sassari, Italy

SO Microbiologica (2003), 26(4), 375-381

CODEN: MIBLDR; ISSN: 1121-7138

PB Luigi Ponzio e Figlio Editori

DT Journal

LA English

AB Anti-*Mycobacterium tuberculosis* drug-resistance, mainly multi-drug resistance (MDR-TB), represents an important public health problem in several countries. The objectives of this study are to: (a) identify the presence of mutations in *M. tuberculosis* isoniazid- and rifampin-resistant strains isolated at the author's institute; (b) evaluate linkage between type of mutation and level of resistance; and (c) determine the usefulness of mol. techniques for rapid detection of such mutations in body specimens. Isoniazid- and rifampin-resistance was tested on 67 *M. tuberculosis* strains by Single-Strand Conformation Polymorphism (SSCP) and Polymerase Chain Reaction-Restriction Fragment Length Polymorphism (PCR-RFLP) assays, using HaeIII, PstUI, BstEII, BstUI enzymes. Drug-resistance of control strains was determined by cultural techniques (fluorimetry- BACTEC 9120). The resistance pattern, determined by fluorimetric assay, was 6.12% for isoniazid and 2% for rifampin. Point mutations were observed in genes *katG* and *rpoB* using BstUI-RFLP and HaeIII-RFLP, resp. Fifteen specimens, shown to be pos. for *M. tuberculosis* based on conventional assays, were tested by SSCP technique. Considering the rising risk of MDR-mycobacteria, it is necessary to rapidly detect both bacteria in biol. specimens and their susceptibility to antimicrobes in order to start prompt and effective therapy. SSCP and PCR-RFLP, together with or as alternatives to traditional methods, may be helpful in this prompt detection.

L11 ANSWER 35 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:467772 CAPLUS

DN 139:359338

TI PCR-Based Methodology for Detecting Multidrug-Resistant Beijing Strains of *Mycobacterium tuberculosis* Circulating in Russia

AU Mokrousov, I.; Otten, T.; Vyazovaya, A.; Limeschenko, E.; Filipenko, M. L.; Sola, C.; Rastogi, N.; Steklova, L.; Vyshnevskiy, B.; Narvskaya, O.

CS Laboratory of Molecular Microbiology, St. Petersburg Pasteur Institute, St. Petersburg, 197101, Russia

SO European Journal of Clinical Microbiology & Infectious Diseases (2003),  
 22(6), 342-348  
 CODEN: EJCDEU; ISSN: 0934-9723  
 PB Springer-Verlag  
 DT Journal  
 LA English  
 AB The genotype of the Beijing strain of Mycobacterium tuberculosis has been identified in 40-50% of the clin. isolates studied in Russia during the last decade. This genotype has been reported to be associated with multiple drug resistance and possesses some significant pathogenic properties. Therefore, early identification of such strains is of extreme importance in the timely detection of drug resistance. The present study was performed on 354 strains isolated in Russia from 1996 to 2002 and previously characterized by IS6110-restriction fragment length polymorphism (RFLP) typing and spoligotyping. These strains included 198 Beijing strains and 156 strains of other genotypes (IS6110-RFLP profiles). A subsequent polymerase chain reaction (PCR) anal. with IS6110-derived outwardly oriented primers (IS6110-PCR) easily discriminated the Beijing strains from non-Beijing strains. The multiplex allele-specific (MAS)-PCR assays were further used to detect mutations in katG315 and rpoB531, associated with resistance to isoniazid and rifampin, resp. The katG315 and rpoB531 mutations were found to be more prevalent among Beijing (96.8% and 77.3%) than among non-Beijing strains (85.7% and 28%). Consequently, we propose a two-step methodol. based on routine PCR and simple agarose gel electrophoresis in order to detect (i) a Beijing family strain using IS6110-PCR, and, (ii) its possible resistance to the major anti-tuberculosis drugs using specific MAS-PCR assays.

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 36 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2001:526222 CAPLUS  
 DN 135:133078  
 TI A method for detection of pathogenic microorganisms  
 IN Herrmann, Bjoern; Kirsebom, Leif; Stolt, Pelle  
 PA Swed.  
 SO PCT Int. Appl., 45 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001051662	A1	20010719	WO 2001-SE31	20010110
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	CA 2397176	AA	20010719	CA 2001-2397176	20010110
	EP 1254258	A1	20021106	EP 2001-901634	20010110
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	JP 2003519494	T2	20030624	JP 2001-551236	20010110
	EE 200200378	A	20031015	EE 2002-378	20010110
	NZ 519649	A	20040227	NZ 2001-519649	20010110
	NO 2002003311	A	20020909	NO 2002-3311	20020709
	US 2003134295	A1	20030717	US 2002-169831	20021113

PRAI SE 2000-61 A 20000110  
WO 2001-SE31 W 20010110

AB The present invention relates to a method for detection of mycobacteria and chlamydia wherein the method includes differentiation between species. The method is especially suitable to detect and to diagnose infection by pathogenic organisms which are hard and/or laborious to detect with conventional methods. The method relies upon anal. of specific variable regions of the RNase P RNA gene, namely the P3 and/or P19 region(s).

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 37 OF 59 USPATFULL on STN

AN 2001:82910 USPATFULL

TI Mycobacterium tuberculosis specific DNA fragment

IN Srivastava, Ranjana, Lucknow-1, India

Kumar, Deepak, Lucknow-1, India

Srivastava, Brahm Shanker, Lucknow-1, India

PA Council of Scientific and Industrial Research, New Delhi, India  
(non-U.S. corporation)

PI US 6242585 B1 20010605

AI US 1998-156836 19980918 (9)

RLI Division of Ser. No. US 1997-997897, filed on 24 Dec 1997, now patented,  
Pat. No. US 6114514

DT Utility

FS Granted

EXNAM Primary Examiner: Swartz, Rodney P.

LREP Ladas & Parry

CLMN Number of Claims: 12

ECL Exemplary Claim: 1

DRWN 13 Drawing Figure(s); 10 Drawing Page(s)

LN.CNT 704

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to a Mycobacterium tuberculosis specific DNA fragment containing IS like and repetitive sequences, a method of production of such DNA fragment and the use of such DNA fragment, for example, to rapidly diagnose Mycobacterium tuberculosis infection in clinical samples, and to identify clinical isolates of Mycobacterium tuberculosis. The DNA fragment may be used to determine information about the epidemiology of Mycobacterium tuberculosis infection.

L11 ANSWER 38 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:88707 CAPLUS

DN 137:227047

TI Application of molecular biology techniques to the diagnosis of nontuberculous mycobacterial infections

AU Ruiz, M.; Rodriguez, J. C.; Escribano, I.; Garcia-Martinez, J.;  
Rodriguez-Valera, F.; Royo, G.

CS S. Microbiologia, Hospital General Universitario de Elche, Alicante,  
03203, Spain

SO APMIS (2001), 109(12), 857-864

CODEN: APMSEL; ISSN: 0903-4641

PB Munksgaard International Publishers Ltd.

DT Journal

LA English

AB A total of 19,723 clin. samples were cultivated for the detection of mycobacteria from Jan. 1995 to Mar. 2001. The 203 strains of nontuberculous mycobacteria isolated were identified with the use of mol. techniques in combination with traditional biochem. tests. The mol. methods applied were PCR-restriction fragment length polymorphism anal. (PRA) alone, or in combination with 16S rRNA and 16S-23S spacer sequencing. The patient records of those with specimens pos. for mycobacteria were analyzed to evaluate the clin. significance of the culture results. Twenty-five of the 124 patients analyzed (20%) were

regarded as having clin. mycobacteriosis. The main species associated with mycobacteriosis were: Mycobacterium avium (13 cases), M. intracellulare (2 cases), M. kansasii (5 cases), M. chelonae (2 cases), M. malmoense (1 case), M. scrofulaceum (1 case) and M. marinum (1 case). The use of PRA alone or in combination with gene sequencing provided valuable help in discerning mycobacteria at both the intra- and interspecies level, thus contributing to a faster and more efficient diagnosis and epidemiol. follow-up.

RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 39 OF 59 USPATFULL on STN

AN 2000:117895 USPATFULL

TI Mycobacterium tuberculosis specific DNA fragment

IN Srivastava, Ranjana, Lucknow, India

Kumar, Deepak, Lucknow, India

Srivastava, Brahm Shanker, Lucknow, India

PA Council of Scientific & Industrial Research, New Delhi, India (non-U.S. corporation)

PI US 6114514 20000905

AI US 1997-997897 19971224 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Swartz, Rodney P.

LREP Ladas & Parry

CLMN Number of Claims: 5

ECL Exemplary Claim: 1

DRWN 10 Drawing Figure(s); 11 Drawing Page(s)

LN.CNT 837

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to a Mycobacterium tuberculosis specific DNA fragment containing IS like and repetitive sequences, a method of production of such DNA fragment and the use of such DNA fragment, for example, to rapidly diagnose Mycobacterium tuberculosis infection in clinical samples, and to identify clinical isolates of Mycobacterium tuberculosis. The DNA fragment may be used to determine information about the epidemiology of Mycobacterium tuberculosis infection.

L11 ANSWER 40 OF 59 USPATFULL on STN

AN 2000:9727 USPATFULL

TI Solid phase amplification process

IN Morris, Charles Phillip, North Adelaide, Australia

Harris, Raymond John, Adelaide, Australia

PA Adelaide Children's Hospital, Adelaide, Australia (non-U.S. corporation)  
University of South Australia, Adelaide, Australia (non-U.S. corporation)

PI US 6017738 20000125

AI US 1996-761862 19961209 (8)

RLI Continuation of Ser. No. US 232070

PRAI AU 1991-9224 19911101

DT Utility

FS Granted

EXNAM Primary Examiner: Horlick, Kenneth R.

LREP Evenson, McKeown, Edwards & Lenahan, P.L.L.C.

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 7 Drawing Figure(s); 6 Drawing Page(s)

LN.CNT 780

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for detecting a target nucleic acid sequence comprises: (a) providing a first primer hybridizing to the target nucleic acid sequence, wherein the primer is immobilized on an immobile solid phase support by a direct chemical linkage between the primer and the solid phase support, wherein the solid phase

support forms a part of or is insertable into a container for a sample to be tested, (b) providing a second primer hybridizing to the target nucleic acid sequence in the opposite direction, wherein the second primer is labelled with a detectable label, (c) reacting the first and second primers with a sample containing nucleic acid sequences under conditions which allow amplification of the nucleic acid sequences that hybridize to the first and second primers in the container for the sample, and (d) detecting the presence of bound second primer. Alternatively, the label on the second primer can be attached or incorporated either during or after the amplification process. An assay system or kit for use in this method includes a first primer hybridizing to the target nucleic acid sequence, a second primer hybridizing to the target nucleic acid sequence in the opposite direction, and reagents for amplification of the sample containing nucleic acid sequences under conditions which allow amplification of the nucleic acid sequences that hybridize to the first and second primers in the container for the sample, and reagents for detection of the label on the bound second primer.

L11 ANSWER 41 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:439285 CAPLUS

DN 131:54717

TI Mutations in the katG gene useful for detection of Mycobacterium tuberculosis

IN Cockerill, Franklin R., III; Kline, Bruce C.; Uhl, James R.

PA Mayo Foundation for Medical Education & Research, USA

SO U.S., 39 pp., Cont.-in-part of U.S. 5,658,733.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5922575	A	19990713	US 1997-852219	19970507
	US 5688639	A	19971118	US 1994-228662	19940418
	US 5658733	A	19970819	US 1995-418782	19950407
	WO 9850585	A1	19981112	WO 1998-US9285	19980506
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9872920	A1	19981127	AU 1998-72920	19980506
	EP 979310	A1	20000216	EP 1998-920316	19980506
	EP 979310	B1	20020313		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AT 214431	E	20020315	AT 1998-920316	19980506
PRAI	US 1994-228662	A2	19940418		
	US 1995-418782	A2	19950407		
	US 1997-852219	A	19970507		
	WO 1998-US9285	W	19980506		
AB	A method for selectively detecting M. tuberculosis is provided employing restriction fragment length polymorphism anal. of an enzymic digest of the M. tuberculosis katG gene. PCR primers are provided to amplify a 620-bp region of the katG gene containing a S315T mutation in codon 315 associated with resistance to isoniazid. RFLP anal. using a restriction endonuclease such as MspI can distinguish the antibiotic-resistant from the antibiotic-sensitive M. tuberculosis.				
RE.CNT	27	THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD			

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 42 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 1999:683060 CAPLUS  
 DN 131:307657  
 TI Detection and identification of the Mycobacterium tuberculosis group using oligonucleotide primers and probes targeting gene for DNA gyrase  $\beta$ -subunit  
 IN Kasai, Hiroaki; Ezaki, Takayuki  
 PA Kaiyo Biotechnology Laboratory K. K., Japan; Marine Biotechnology Institute  
 SO Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11290079	A2	19991026	JP 1998-98879	19980410
	JP 3634960	B2	20050330		
PRAI	JP 1998-98879		19980410		
AB	PCR or RFLP-based methods for identification and detection of the Mycobacterium tuberculosis group; oligonucleotide primers and probes targeting the gene for DNA gyrase $\beta$ -subunit gyrB and restriction endonucleases for the methods; and assay kit containing them are disclosed. Identification of M. tuberculosis, M. bovis, M. africanum, and M. microti was shown.				

L11 ANSWER 43 OF 59 USPATFULL on STN  
 AN 1999:166812 USPATFULL  
 TI Method for processing mycobacteria  
 IN Thornton, Charles G., Gaithersburg, MD, United States  
 PA Integrated Research Technology, LLC, Baltimore, MD, United States (U.S. corporation)  
 PI US 6004771 19991221  
 AI US 1997-907649 19970811 (8)  
 RLI Continuation of Ser. No. US 1995-393564, filed on 23 Feb 1995, now patented, Pat. No. US 5658749 which is a continuation-in-part of Ser. No. US 1994-322864, filed on 11 Oct 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-224592, filed on 7 Apr 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-222731, filed on 5 Apr 1994, now abandoned  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Leary, Louise N.  
 LREP Sterne, Kessler, Goldstein & Fox, P.L.L.C.  
 CLMN Number of Claims: 48  
 ECL Exemplary Claim: 1  
 DRWN 26 Drawing Figure(s); 26 Drawing Page(s)  
 LN.CNT 7838  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB A method for the preparation of Mycobacteria from any liquid, semi solid or exotic source is described. The extracted Mycobacterial sample is suitable for detection by culture and amplification.

L11 ANSWER 44 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 1998:749424 CAPLUS  
 DN 130:21326  
 TI Nucleic acid and conformation analysis by nucleic acid hybridization with pathogen detection  
 IN Dong, Fang; Lyamichev, Victor I.; Prudent, James R.; Fors, Lance; Neri, Bruce P.; Brow, Mary Ann D.; Anderson, Todd A.; Dahlberg, James E.  
 PA Third Wave Technologies, Inc., USA  
 SO PCT Int. Appl., 279 pp.

CODEN: PIXXD2

DT Patent  
LA English  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9850403	A1	19981112	WO 1998-US3194	19980505
	W: AU, CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 6214545	B1	20010410	US 1997-851588	19970505
	US 6210880	B1	20010403	US 1997-934097	19970919
	US 6194149	B1	20010227	US 1998-34205	19980303
	CA 2289872	AA	19981112	CA 1998-2289872	19980505
	AU 9872440	A1	19981127	AU 1998-72440	19980505
	AU 744369	B2	20020221		
	EP 983292	A1	20000308	EP 1998-919712	19980505
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2001523111	T2	20011120	JP 1998-548047	19980505
	US 6355437	B1	20020312	US 2000-677218	20001002
	US 6358691	B1	20020319	US 2000-677192	20001002
	US 6780585	B1	20040824	US 2000-676768	20001002
	US 2002119454	A1	20020829	US 2001-825574	20010403
	US 6709819	B2	20040323		
	US 2005014163	A1	20050120	US 2003-655362	20030904
PRAI	US 1997-851588	A	19970505		
	US 1997-934097	A	19970919		
	US 1998-34205	A2	19980303		
	WO 1998-US3194	W	19980505		
	US 2000-402618	A1	20000718		

AB The present invention relates to methods and compns. for treating nucleic acids, and in particular, methods and compns. for the detection and characterization of nucleic acid sequences and sequence changes. The invention provides methods for examining the conformations assumed by single strands of nucleic acid, forming the basis of novel methods of detection of specific nucleic acid sequences. The present invention contemplates use of novel detection methods for, among other uses, clin. diagnostic purposes, including but not limited to the detection and identification of pathogenic organisms. Examples are presented for the anal. of Mycobacterium tuberculosis and hepatitis C virus genes.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 45 OF 59 USPATFULL on STN

AN 1998:157155 USPATFULL

TI Amplification and detection process

IN Harris, Raymond John, Adelaide, Australia

PA Morris, Charles Phillip, North Adelaide, Australia

PA University of Australia, United States (non-U.S. corporation)

PA Adelaide Children's Hospital, United States (non-U.S. corporation)

PI US 5849544 19981215

WO 9402634 19940203

AI US 1995-374764 19950124 (8)

WO 1993-AU379 19930726

19950124 PCT 371 date

19950124 PCT 102(e) date

PRAI AU 1992-3705 19920724

DT Utility

FS Granted

EXNAM Primary Examiner: Campbell, Eggerton A.

LREP Brown, Martin, Haller & McClain, LLP

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 1076

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This method for detecting a target nucleic acid sequence involves amplification and detection in the same vessel and comprises: (a) amplification of the target nucleic sequence in a vessel which is provided with a solid phase capture probe comprising a nucleic acid sequence capable of hybridizing to at least a portion of said amplified target nucleic acid sequence, said capture probe being incapable of participating or not participating in standard nucleic acid sequence amplification processes, (b) bringing a sample suspected of comprising said target nucleic acid sequence into contact with said capture probe under conditions which allow said amplified target nucleic acid sequence to be bound by said capture probe, and (c) detecting the presence of bound target nucleic acid sequence. In a further aspect, the present invention provides an assay system or kit, for detecting a target nucleic acid sequence in a sample suspected of comprising said target nucleic acid sequence, comprising: (a) a capture probe comprising a nucleic acid sequence capable of hybridizing to at least a portion of said amplified target nucleic acid sequence, said capture probe being immobilized on a solid phase support which forms a part of or is insertable into a container for the sample, and said capture probe being incapable of participating in standard nucleic acid sequence amplification processes, (b) reagents for amplification of said target nucleic acid sequence, and (c) means for detecting said target nucleic acid sequence, when bound by said capture probe.

L11 ANSWER 46 OF 59 USPATFULL on STN

AN 1998:118970 USPATFULL

TI Polymerase chain reaction/restriction fragment polymorphism method for the detection and typing of human papillomaviruses

IN Silverstein, Saul J., Irvington, NY, United States

Lungu, Octavian, New York, NY, United States

Wright, Jr., Thomas C., Irvington, NY, United States

PA The Trustees of Columbia University in the City of New York, New York, NY, United States (U.S. corporation)

PI US 5814448 19980929

AI US 1996-594600 19960131 (8)

RLI Continuation of Ser. No. US 1994-255561, filed on 8 Jun 1994, now patented, Pat. No. US 5543294 which is a continuation of Ser. No. US 1992-916940, filed on 20 Jul 1992 which is a continuation-in-part of Ser. No. US 1991-733109, filed on 19 Jul 1991, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Ketter, James; Assistant Examiner: Brusca, John S.

LREP White, John P.

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN 23 Drawing Figure(s); 10 Drawing Page(s)

LN.CNT 2023

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides a method of typing a human papillomavirus in a patient infected by human papillomavirus which comprises: obtaining a sample containing DNA from the human papillomavirus to be typed; amplifying the L1 portion of the human papillomavirus DNA; treating the resulting amplified DNA with a plurality of predetermined restriction enzymes so as to produce restriction fragments; and analyzing the fragments so produces so as to type the human papillomavirus.

L11 ANSWER 47 OF 59 USPATFULL on STN

AN 97:120500 USPATFULL

TI Virulence-attenuating genetic deletions deleted from mycobacterium BCG

IN Stover, Charles Kendall, Mercer Island, WA, United States

Mahairas, Gregory G., Seattle, WA, United States

PA PathoGenesis Corporation, Seattle, WA, United States (U.S. corporation)  
 PI US 5700683 19971223  
 AI US 1995-390878 19950217 (8)  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Elliott, George C.; Assistant Examiner: Fredman, Jeffrey  
 LREP Townsend and Townsend and Crew LLP  
 CLMN Number of Claims: 57  
 ECL Exemplary Claim: 1  
 DRWN 63 Drawing Figure(s); 63 Drawing Page(s)  
 LN.CNT 2403  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention provides specific genetic deletions that result in an avirulent phenotype of a mycobacterium. These deletions may be used as phenotypic markers of providing a means for distinguishing between disease-producing and non-disease producing mycobacteria.

L11 ANSWER 48 OF 59 USPATFULL on STN  
 AN 97:73459 USPATFULL  
 TI Method for processing mycobacteria  
 IN Thornton, Charles G., Gaithersburg, MD, United States  
 PA Corning Clinical Laboratories, Inc., Baltimore, MD, United States (U.S. corporation)  
 PI US 5658749 19970819  
 AI US 1995-393564 19950223 (8)  
 RLI Continuation-in-part of Ser. No. US 1994-322864, filed on 11 Oct 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-224592, filed on 7 Apr 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-222731, filed on 5 Apr 1994, now abandoned  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Kight, John; Assistant Examiner: Leary, Louise  
 LREP Sterne, Kessler, Goldstein & Fox p.l.l.c.  
 CLMN Number of Claims: 72  
 ECL Exemplary Claim: 1  
 DRWN 26 Drawing Figure(s); 26 Drawing Page(s)  
 LN.CNT 8473  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB A method for the preparation of Mycobacteria from any liquid, semi-solid or exotic source is described. The extracted Mycobacterial sample is suitable for detection by culture and amplification.

L11 ANSWER 49 OF 59 USPATFULL on STN  
 AN 97:65999 USPATFULL  
 TI Rapid amplification-based subtyping of mycobacterium tuberculosis  
 IN Plikaytis, Bonnie B., Tucker, GA, United States  
 Shinnick, Thomas M., Atlanta, GA, United States  
 Crawford, Jack T., Dunwoody, GA, United States  
 PA The United States of America as represented by the Secretary of the Department of Health and Human Services, Washington, DC, United States (U.S. government)  
 PI US 5652106 19970729  
 AI US 1995-548199 19951025 (8)  
 RLI Continuation of Ser. No. US 1994-327065, filed on 19 Oct 1994, now abandoned which is a continuation of Ser. No. US 1993-72450, filed on 4 Jun 1993, now abandoned  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Horlick, Kenneth R.; Assistant Examiner: Tung, Joyce  
 LREP Jones & Askew  
 CLMN Number of Claims: 14  
 ECL Exemplary Claim: 1

DRWN 2 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 1193

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods of detecting or distinguishing the DNA of an individual strain of *Mycobacterium tuberculosis* utilizing the polymerase chain reaction (PCR). Reproducible, unique patterns can be produced allowing the identification of unknown *M. tuberculosis* DNA by performing this reaction and comparing the pattern produced to the known reproducible, unique patterns. The invention further provides a kit useful to detect or distinguish the DNA of an individual strain of *M. tuberculosis* in a sample, comprising specific primers for use in PCR. The present invention also provides a method of determining the presence of a multidrug-resistant *M. tuberculosis* by detecting the presence of a specific arrangement of genomic DNA. Such detection can be done using PCR or a ligase chain reaction (LCR). The present invention provides nucleic acid sequences useful in detecting multidrug-resistant *M. tuberculosis*.

L11 ANSWER 50 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:778806 CAPLUS

DN 128:57937

TI Rapid diagnosis of isoniazid resistance by detection of mutations in *katG* and *inhA* of *Mycobacterium tuberculosis* from Korea

AU Kim, Seok-Yong; Lee, Ji-Youn; Ryu, Sang-Ryeol; Kim, Sang-Jae; Bai, Gil-Han

CS Department of Microbiology College of Medicine, Chungbuk National University, Cheongju, S. Korea

SO Taehan Misaengmul Hakhoechi (1997), 32(5), 569-576

CODEN: TMHCDX; ISSN: 0253-3162

PB Korean Society for Microbiology

DT Journal

LA Korean

AB Twenty-nine isoniazid (INH)-resistant isolated strains and an INH-sensitive reference strain (H37Rv) of *Mycobacterium tuberculosis* were analyzed by polymerase chain reaction-single strand conformational polymorphism (PCR-SSCP) and *NciI* restriction mapping for the detection of mutations in *katG* gene and *inhA* gene. The *katG* gene was divided into 3 parts (Akat, Bkat, Ckat; each part is about 800 bp) and amplified, *inhA* gene was amplified as a whole. Each of the amplified 800-bp DNA was digested into small fragments of <400 bp with restriction enzymes for the direct PCR-SSCP anal. Firstly, 10 strains were analyzed. All the 10 isolates showed clearly distinct SSCP patterns in Bkat from that of the reference strain, but only 2 isolates showed distinct SSCP patterns in Akat, and no isolated strain showed any distinct SSCP patterns in Ckat. Ten isolates also showed distinct SSCP patterns in *inhA*. *NciI* restriction mapping of Bkat showed mutation in codon 463 in 7 strains among 10 isolated strains. With these results an early detection strategy for the INH-resistant *M. tuberculosis* was applied to the rest of 19 isolated INH resistant strains. Firstly, isolates were screened by *NciI* mapping in Bkat, and 13 strains showed mutations in codon 463. Secondly, the rest of 6 INH resistant isolates were analyzed by PCR-SSCP with restriction enzyme digestion (PCR-SSCP-RE) in Bkat, and all the strains showed distinct SSCP patterns from that of the INH-sensitive reference strain. This proved the strategy as effective and economic and time saving method in early detection of INH resistant *M. tuberculosis*.

L11 ANSWER 51 OF 59 MEDLINE on STN

AN 1998168601 MEDLINE

DN PubMed ID: 9507757

TI [PCR detection of *Mycobacterium tuberculosis* lacking IS 6110].

Detection par PCR de *Mycobacterium tuberculosis* sans IS 6110.

AU el Baghdadi J; Lazraq R; Benani A; Naciri M; Ibrahimy S; Benslimane A

CS Unite des mycobacteries, Institut Pasteur du Maroc, Casablanca, Maroc.

SO Bulletin de la Societe de pathologie exotique (1990), (1997) Vol. 90, No. 5, pp. 303-6.  
Journal code: 9212564. ISSN: 0037-9085.

CY France

DT Journal; Article; (JOURNAL ARTICLE)

LA French

FS Priority Journals

EM 199804

ED Entered STN: 16 Apr 1998

Last Updated on STN: 16 Apr 1998

Entered Medline: 3 Apr 1998

AB We have evaluated the frequency of *M. tuberculosis* strains which lack IS 6110 among 102 sputa isolated from Moroccan patients. A pair of primers was designed to amplify a 201bp DNA fragment of IS 6110. The amplified DNA was detected by ethidium bromide stained agarose gel electrophoresis and confirmed by southern blot hybridization with a 32P-labelled probe (PMT02). To detect the presence of amplification inhibitors, an internal control DNA was added in each negative PCR result. Among 102 samples, 6 sputa were negative by PCR-IS 6110 but culture positive. The test of detection of *M. tuberculosis* for 2/6 sputa by PCR Amplicor amplifying 584 pb of rRNA 16s sequence was positive. RFLP analysis of these 2 strains revealed no bands hybridizing IS 6110 but PCR-Mt 308 was positive. These results confirmed that these *M. tuberculosis* strains are lacking IS 6110.

L11 ANSWER 52 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:165663 CAPLUS

DN 126:195824

TI Use of polymerase chain reaction single-strand conformation polymorphism (PCR-SSCP) analysis to detect a point mutation in the catalase-peroxidase gene (katG) of *Mycobacterium tuberculosis*  
AU Temesgen, Zalalem; Satoh, Koji; Uhl, James R.; Kline, Bruce C.; Cockerill, Franklin R., III

CS Dep. Internal Med., Mayo Clinic, Rochester, MN, 55905, USA

SO Molecular and Cellular Probes (1997), 11(1), 59-63

CODEN: MCPRE6; ISSN: 0890-8508

PB Academic

DT Journal

LA English

AB We have previously reported that a significant percentage (44%) of isoniazid-resistant *Mycobacterium tuberculosis* strains carry an arginine to leucine mutation in codon 463 (R463L) in the catalase-peroxidase gene (katG). For the current study, we compared the utility of one mutation screening method, polymerase chain reaction-single strand conformation polymorphism (PCR-SSCP) anal., with a reference method, polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP), to detect this mutation. The PCR-SSCP method detects mutations by electrophoretic mobility shifts of single-stranded DNA in nondenaturing polyacrylamide gels. The RFLP method detects a loss in an MspI restriction site which occurs when the R463L is present. Eighty-one *M. tuberculosis* strains, including the wild type strain H37Rv, with isoniazid susceptibility in the range <0.12 to >32 µg mL<sup>-1</sup> were evaluated. The results for the PCR-SSCP method were in complete agreement with the PCR-MspI RFLP reference method. Of 81 *M. tuberculosis* strains analyzed, 13 showed mobility shifts by the PCR-SSCP method and all of those strains carried the R463L as detected by the PCR-MspI RFLP method. All of the remaining 54 strains had PCR-SSCP and PCR-MspI RFLP results identical to the wild type (R463) *M. tuberculosis* strain, H37Rv. It is concluded that the described PCR-SSCP is a reliable method for screening *M. tuberculosis* strains for the katG R463L mutation.

L11 ANSWER 53 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 4

AN 1996:535069 CAPLUS  
 DN 125:189967  
 TI Diagnosis of congenital adrenal hyperplasia, papillomavirus infection and identification and typing of mycobacteria by polymerase chain reaction and restriction fragment length polymorphism  
 IN Silverstein, Saul J.; Lungu, Octavian; Wright, Thomas C., Jr.  
 PA Columbia University, USA  
 SO U.S., 31 pp., Cont. of U.S. Ser. No. 916, 940, abandoned.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5543294	A	19960806	US 1994-255561	19940608
	US 5814448	A	19980929	US 1996-594600	19960131
PRAI	US 1991-733109	B2	19910719		
	US 1992-916940	B1	19920720		
	US 1994-255561	A1	19940608		

AB The subject invention provides a method of diagnosing congenital adrenal hyperplasia in a human subject. The subject invention also provides a method of typing a human papillomavirus in a patient infected by a human papillomavirus. The subject invention further provides a method for detecting Mycobacteria in a clin. sample. Finally, the subject invention provides a method for typing Mycobacteria in a clin. sample containing Mycobacteria.

L11 ANSWER 54 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:387456 CAPLUS

DN 123:26454

TI Detection and identification of mycobacteria by PCR-RFLP method

AU Hidaka, Eiko; Ueno, Ichiro; Kawakami, Yoshiyuki; Furuwatari, Chizumi; Furihata, Kenichi; Katsuyama, Tsutomu

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SO Rinsho Byori (1995), 43(2), 155-61

CODEN: RBYOAI; ISSN: 0047-1860

DT Journal

LA Japanese

AB A simple method is represented for the detection and identification of mycobacteria (Mycobacterium tuberculosis, M. marinum, M. scrofulaceum, M. intracellulare, M. avium, M. fortuitum, M. chelonae) using PCR-RFLP method for the 65 kDa antigen with high sensitivity and specificity. This includes the amplification of mycobacterial gene encoding a part of the 65 kDa antigen. Subsequently, the region amplified by PCR from the 7 standard bacterial strains was sequenced. As the results, it was found that HaeIII restriction enzyme is suitable for the prompt and easy discrimination among the 7 strains examined. It was concluded that this method is time-saving and possibly applicable for the rapid detection of mycobacterial species including MOTT (mycobacteria other than M. tuberculosis complex) from clin. specimens in routine clin. labs.

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 DUPLICATE 5

AN 94266455 EMBASE

DN 1994266455

TI Studies on bacteriological diagnostic methods for mycobacteria.

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SO Kekkaku, (1994) Vol. 69, No. 8, pp. 527-533. .

ISSN: 0022-9776 CODEN: KKKKAG

CY Japan

DT Journal; Article  
 FS 004 Microbiology  
 017 Public Health, Social Medicine and Epidemiology  
 037 Drug Literature Index  
 LA Japanese  
 SL English  
 AB Two systems, radiometric BACTEC and biphasic MB-Check, based on liquid media proved to be significantly better than the egg-based solid media for the isolation of mycobacteria from clinical specimens. The difference in the rates of isolation of mycobacteria between two groups of media was more remarkable with smear-negative specimens. The time to the detection of the Mycobacterium tuberculosis complex with MB-Check was shorter than that with the 3% Ogawa egg method but longer than that with BACTEC. The polymerase chain reaction (PCR) using oligonucleotides based on the repetitive sequence (IS986) of M. tuberculosis as a primer and the Gen-Probe Amplified Mycobacterium Tuberculosis Direct Test (MTD), which combines an M. tuberculosis rRNA amplification method with the hybridization protection assay format, were evaluated for detection of M. tuberculosis in clinical samples. Although the sensitivities of the PCR and MTD appeared to be similar to that of culture with the MB-Check system, the two methods based on nucleic acid amplification should be very useful for rapid detection of M. tuberculosis infections without the long time required for culture of M. tuberculosis. Epidemiological studies with techniques which allow differentiation of strains within M. tuberculosis groups are important for limiting the dissemination of the disease. We analyzed six groups of small outbreaks of M. tuberculosis infections by restriction fragment length polymorphism (RFLP) analysis. Five showed identical fingerprints within each group, but one which was also suspected to have a common source of infection showed different banding patterns; emphasizing that RFLP analysis using IS986 as a probe is useful in epidemiological studies of tuberculosis. The Avi-3 antigen, which is found only in M. avium culture sonic extracts, is species specific and results in strong skin test activity in guinea pigs sensitized with heat-killed M. avium. Its gene was cloned and sequenced. The gene encoded a 194-amino-acid polypeptide with a molecular weight of 21,500. A recombinant Avi-3 antigen expressed in Escherichia coli reacted with monoclonal and polyclonal antibodies raised against the native Avi-3 antigen. To identify epitopes on this protein, various parts of the Avi-3 antigen were expressed as  $\beta$ -galactosidase fusion protein. A B-cell epitope (Asn-176 to Ala-186) and two T-cell epitopes (Glu-75 to Ile-86 and Arg-155 to Leu-164) were thus defined. The synthetic polymerized peptides of the T-cell epitopes were proved to elicit a delayed cutaneous hypersensitivity reaction in guinea pigs.

L11 ANSWER 56 OF 59 USPATFULL on STN  
 AN 93:54639 USPATFULL  
 TI Diagnostics for mycobacteria in public health, medical, and veterinary practice  
 IN McFadden, John-Jo, London, England  
 Hermon-Taylor, John, London, England  
 PA Bioscience International, Inc., Boston, MA, United States (U.S. corporation)  
 PI US 5225324 19930706  
 AI US 1992-869886 19920414 (7)  
 RLI Continuation of Ser. No. US 1988-185113, filed on 22 Apr 1988, now abandoned  
 PRAI GB 1987-9803 19870424  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Moskowitz, Margaret; Assistant Examiner: Zitomer, Stephanie W.  
 LREP Reed & Robins  
 CLMN Number of Claims: 26

ECL Exemplary Claim: 2  
DRWN 7 Drawing Figure(s); 9 Drawing Page(s)  
LN.CNT 789

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a family of DNA insertion sequences (ISMY) of mycobacterial origin and other DNA probes which may be used as probes in assay methods for the identification of mycobacteria and the differentiation between closely related mycobacterial strains and species. In one method the probes are used to distinguish pathogenic *M. paratuberculosis* from *M. avium*, which finds an application in the diagnosis of Crohn's disease in humans and Johne's disease in animals. The use of ISMY, and of proteins and peptides encoded by ISMY, in vaccines, pharmaceutical preparations and diagnostic test kits is also disclosed.

L11 ANSWER 57 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1994:46791 CAPLUS

DN 120:46791

TI Analysis of PCR products from various mycobacteria using a primer pair for the nucleotide sequence of 65 kilodalton antigen

AU Yamazaki, Toshio; Nakamura, Reiko M.

CS Dep. Bacteriol., Natl. Inst. Health, Tokyo, 162, Japan

SO Kekkaku (1993), 68(6), 419-25

CODEN: KEKKAG; ISSN: 0022-9776

DT Journal

LA Japanese

AB Sequences of the DNA fragments amplified in PCR using a primer pair YNP-1 and YNP-2 and template DNAs from various mycobacteria were analyzed with the kit Sequenase Ver. 2.0. The size of each PCR product was as follows; 164 bp for *M. Mycobacterium tuberculosis* and *M. bovis*, 137 bp for *M. kansasii*, 109 bp for *M. intracellulare*, 136 bp for *m. gordonae*. Homol. of the sequences to *M. tuberculosis* was 100% to *M. bovis*, 76% to *M. kansasii*, 64% to *M. intracellulare*, and 74% to *M. gordonae*. Only 2 of 12 strains belonging to *M. avium* were pos. in PCR in this experiment. The sequence of these PCR products was 100% homologous to that of *M. intracellulare*. RFLP using *Mbo*I and *Bst*EII was examined in each PCR product. Theor., it is expected that the product of *M. tuberculosis* complex is cut into 119 bp and 45 bp fragments by *Bst*EII and 140 bp and 24 bp fragments by *Mbo* I; *M. kansasii* is cut by only *Mbo* I into 102 bp and 35 bp fragments; *M. gordonae* 92 bp and 44 bp fragments by *Bst*EII and 112 bp and 24 bp fragments by *Mbo*II. Neither enzyme can cut the product of *M. intracellulare*. The results of the enzyme digestion were consistent with the expectation. The combination of PCR and RFLP could become a powerful tool for the detection and identification of mycobacteria from the clin. isolates within 48 h.

L11 ANSWER 58 OF 59 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:70192 CAPLUS

DN 123:1990

TI Rapid detection and identification of mycobacteria in sputum samples by nested polymerase chain reaction and restriction fragment length polymorphisms of *dnaJ* heat shock protein gene

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CS Second Department Internal Medicine, Hiroshima University School Medicine, Minami, 734, Japan

SO Hiroshima Journal of Medical Sciences (1993), 42(1), 21-31

CODEN: HIJMAC; ISSN: 0018-2052

DT Journal

LA English

AB In the diagnosis of mycobacterial infection, more than 4-8 wk is required to identify the species of mycobacterium responsible for an infection. Therefore, the development of a method for the rapid detection and

identification of mycobacteria is necessary for selecting an optimal therapeutic plan early in the patient's course. For this purpose, we developed a method combining a nested polymerase chain reaction (nested PCR) procedure and a restriction fragment length polymorphisms (RFLP) anal. of the dnaJ gene of mycobacteria, which codes for a heat shock protein. The PCR procedure allowed the sensitive detection of mycobacterial DNA in clin. samples. Using only 10 fg of mycobacterial DNA as a reaction mixture, a detectable band of target DNA segments could be yielded on an agarose gel. This indicates that even with a single genome amount, the PCR is able to detect mycobacteria. The RFLP anal. of the PCR products allowed us rapidly to distinguish the strains belonging to the M. tuberculosis complex from 11 different strains of nontuberculous mycobacteria. Within 2 days, the method is able to identify the mycobacterial species present in the sputum. Moreover, it has the advantage of not requiring the use of radioisotopes, which strongly enhances its clin. usefulness.

L11 ANSWER 59 OF 59 MEDLINE on STN  
 AN 93195424 MEDLINE  
 DN PubMed ID: 1294656  
 TI Detection of mycobacteria by DNA amplification.  
 AU Uematsu K; Miki R; Chiba N; Ishikawa K  
 CS Yamanashi Institute for Public Health.  
 SO Kansenshogaku zasshi. The Journal of the Japanese Association for Infectious Diseases, (1992 Nov) Vol. 66, No. 11, pp. 1556-65.  
 Journal code: 0236671. ISSN: 0387-5911.  
 CY Japan  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA Japanese  
 FS Priority Journals  
 EM 199304  
 ED Entered STN: 23 Apr 1993  
 Last Updated on STN: 23 Apr 1993  
 Entered Medline: 14 Apr 1993  
 AB Polymerase Chain Reaction (PCR) was used to detect and to identify Mycobacterium species. In this study, 13 out of 14 Mycobacterium species were detected by using six pairs of oligonucleotide primers. The PCR product was detected by non-isotopic southern blot hybridization even when as little as 10 fg of purified M. tuberculosis DNA was used. And 8 mycobacterial species were identified by PCR-Restriction Fragment Length Polymorphism (RFLP) using two kinds of endonuclease.